

OXYGEN SYSTEMS

AEROX HIGH-DURATION AVIATION OXYGEN SYSTEMS



Aerox 2D system Aerox 4M system

Prior to the introduction of the Aerox system, the wise pilot reserved the use of oxygen for situations where it was legally necessary, i.e. above 12,500 ft. This was often a practical decision based upon factors like: Short duration of supply, uncomfortable masks, difficult and costly refills, heavy weight and large bulk. Aerox systems remove the foregoing objections, plus one more. The price is right. Add to your flying comfort by using oxygen at altitudes as low as 5000 ft. Aerox Oxygen Systems include light-weight aluminum cylinders, regulators, all hardware, flow meter, and nasal cannulas (masks available as option).

Oxysaver 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!

- Low profile
- 1, 2, & 4 place
- Standard Aircraft filler for easy filling
- Convenient top mounted ON/OFF valve
- Equipped with Aerox standard plug sockets
- Over pressure safety valve
- Built in cylinder pressure gauge

COMPLETE AEROX SYSTEMS (ADJUSTABLE FLOW)

Part No.	Model	Description	Price
13-18895	1A	1 outlet, 6 Cu Ft. Cyl. w/Flow Meter & Cannula	\$448.00
13-18896	1C	1 outlet, 9 Cu. Ft. Cyl. w/Flow Meter & Cannula	\$468.00
13-18897	1D	1 outlet, 13 Cu Ft. Cyl. w/Flow Meter & Cannula	\$480.00
13-18898	2A	2 outlet, 6 Cu. Ft. Cyl. w/Flow Meters & Cannulas	\$564.00
13-18899	2C	2 outlet, 9 Cu Ft. Cyl. w/Flow Meters & Cannulas	\$477.96
13-18900	2D	2 outlet, 13 Cu. Ft. Cyl. w/Flow Meters & Cannulas	\$569.00
13-18901	2E	2 outlet, 22 Cu Ft. Cyl. w/Flow Meters & Cannulas	\$601.00
13-18902	2M	2 outlet, 22 Cu. Ft. Cyl. w/Flow Meters & Cannulas	\$623.00
13-18903	4C	4 outlet, 9 Cu Ft. Cyl. w/Flow Meters & Cannulas	\$584.00
13-18904	4D	4 outlet, 13 Cu. Ft. Cyl. w/Flow Meters & Cannulas	\$600.80
13-18950	4E	4 outlet, 22 Cu Ft. Cyl. w/Flow Meters & Cannulas	\$615.20
13-18906	4M	4 outlet, 22 Cu. Ft. Cyl. w/Flow Meters & Cannulas	\$809.00
13-18915	6M	6 outlet, 22 Cu Ft. Cyl. w/Flow Meters & Cannulas	\$788.00
13-18905	6F	6 outlet, 33 Cu. Ft. Cyl. w/Flow Meters & Cannulas	\$974.00

AEROX ACCESSORIES

P/N	Description	Price
13-18910	CC Oxysaver Cannula	\$33.50
13-18960	MSK-C Rebreather Mask (Child)	\$7.50
13-18920	CR-A Regular Cannula	\$5.65
13-18970	Metal Clamp Bracket for 13 or 22Cft cyl	\$36.00
13-18930	CR-C Reg. Cannula (Child)	\$5.60
13-18940	MSK-A Rebreather Mask	\$7.50
13-18990	Padded seat back holder for 33Cft. cyl.A,B,C,D,E	\$73.95

AEROX RETROFIT KITS FOR BUILT-IN SYSTEMS OR OTHER PORTABLES



FITTING IDENTIFICATION CHART (Not Sold Separately)

The Aerox® Retrofit Kit consists of 3 parts:
1.) Oxysaver® Cannula—this comfortable device may be used in place of your mask up to 18,000 ft. MSL. It has a conserving feature which can extend your oxygen supply by up to four times.
2.) Aerox Flowmeter/indicator—this combination device not only indicates oxygen flow but also shows how much in liters/min.
3.) Aerox Adjustable Flow Restrictor—a thumb screw operated needle restrictor valve allows you to precisely control flow. Shown are most of the connectors for general aviation. If you want us to supply the connector, be sure to indicate which is your type.

Part No.	Aerox Model	Retrofit Kits	Price
13-18992	RK-SC	Kit plus Scott type fitting SC	\$105.00
13-18994	RK-PB-1	Kit w/Puritan-Bennett type fitting (new style)	\$105.00
13-18995	RK-PB-2	Kit w/Puritan-Bennett type fitting (old style)	\$105.00
13-18996	RK-SK	Kit plus Sky-Ox fitting (new style)SK	\$112.00

AEROX PRO-O2 EMERGENCY HANDHELD OXYGEN SYSTEMS



The Aerox Pro-O2 is refillable and light-weight, emergency handheld oxygen system. In the event that the primary oxygen system fails, the Pro-O2 emergency handheld oxygen system 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 12,500ft. MSL and 14,000ft. MSL where maneuvering over mountains or turbulent weather is necessary, the Pro-O2 emergency handheld oxygen system provides oxygen to extend these brief legs. According to FARs

Section 91.211, and part of a flight between 12,500ft. and 14,000ft. over 30 min. would require supplemental oxygen. By using the Pro-O2, a pilot could extend a higher altitude leg that previously needed to be cut short. Fits inside a flight bag or side-compartment and offers 15 to 30 min. of oxygen depending on altitude, O2 cylinder size and number of users.

Oxygen flow of the Pro-O2 is activated immediately by pulling the mask or ring away from the tank. Replaces costly and dangerous O2 generators, which produce heat during the chemical separation process. Included with the refillable Pro-O2 is a regulator with gauge, mask and a refillable cylinder.

Pro-O2-2 (2 Cu. Ft./1 mask)P/N 13-02735\$319.00

Pro-O2-4 (2 Cu. Ft./2 masks)P/N 13-02736\$349.00

AEROX SILICON MASKS



Upgrade from a Scott mask with dynamic or carbon mic with these light-weight (4 oz.) silicon, quick donning masks. Very comfortable and includes 5 ft. of tubing and mic plug. Specify small, medium, or large.

Silicon mask w/mic
 P/N 13-00413\$308.00

Silicon mask w/o mic
 P/N 13-00414\$96.00

BR-M AEROX BRACKET



Bracket Assembly, SS, with Lock, or Cyl Diameter (2 needed per system)

Description: BR-M AEROX BRACKET
 P/N: 13-04033.....\$35.50

PS

OXIMETERS

AEROXIMETER



Developed at the request of one of the major aviation manufacturers, this new product protects you from the 2 major biological 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. Size: 1-3/8" thick X 5" w X 2-5/8" h.

- AEROXIMETER CO/LOW OXYGEN 1-PL
P/N 13-02717..... **\$1,055.00**
- AEROXIMETER CO/LOW OXYGEN 2 PL
P/N 13-02718 **\$1,374.00**

FLIGHT STAT PULSE OXIMETER



Know the symptoms of in-flight hypoxia and evaluate your pulse rate and blood oxygen saturation with the FlightStat® Pulse Oximeter. FlightStat 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..... **\$374.95**

THE OWL AVIATION OXIMETER



Using accurate noninvasive oximeter technology, the OWL 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 alert 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.

The OWL will also alert the user in the event the batteries become low by an audible "caution" and a visual indication with a red LED.

The greatest advantage of the OWL is that it 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 13-03722..... **\$885.00**

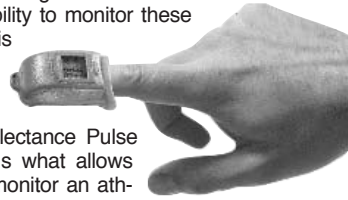
CHECK MATE PULSE OXIMETER



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™ accurately measures blood oxygen saturation levels and heart pulse rate. 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. Check Mate™ answers the sports and aviation markets' demand for a lightweight, inexpensive monitor for measuring blood oxygen saturation and heart rate during physically active and high-altitude activities. It offers the user a greater ability to monitor these vital signs under motion and is less expensive than most available devices.



SPO Medical's patented Reflectance Pulse Oximetry (RPO) technology is what allows Check Mate™ to effectively monitor an athlete during such activities as: Mountain Climbing, High-Altitude Street Cycling, Light Jogging, Speed Walking and Running. Check Mate™ will monitor SpO2 in almost any physical activity that does not include significant arm swinging (e.g., jumping jacks). For most athletes, a little learning goes a long way. After a few hours of experimenting with various movements, athletes quickly learn how to use Check Mate™ in almost any activity.

Check Mate™ is based on SPO Medical's uniquely patented algorithms that use the Reflective Pulse Oximetry Technology for accurate oximetry measurement. It also addresses problems typically associated with motion artifacts, ensuring accurate and reliable readings. The unit is designed to utilize very low power for extended usage, eliminating the need for frequent battery replacement.

To operate simply place the sensor on your finger and turn it on.
P/N 13-03722..... **\$885.00**

Feather Lite Portable Oxygen Systems

These two place and four place oxygen systems feature aluminum D size cylinders and include optimizer cannulas and masks. These flow meters enable the systems to be used at low altitudes where low oxygen flows are used. This is particularly helpful for night flight when oxygen use is recommended above 5000 ft. These precision flow meters save the pilot on oxygen costs. These systems are designed with couplings that will stop oxygen flow to a station whose hose or flow meter has been accidentally disconnected, preventing rapid oxygen loss from the system. Feather Lite Oxygen Systems are warranted for 5 years (excludes cannulas and masks).

- FEATURES:**
- Highest Quality Components Available
 - Easy Quick Connect Fittings on Feed Hoses
 - Compact Dual Connection Regulator
 - 5 Year Full Warranty On Non- Disposables
 - Handy Carrying Case w/Straps
 - 2 Chad Therapeutics Oxymizer Cannulas
 - 2 Masks For Flights Above 18,000'
 - 2 Precision Flow Meters w/Needle Valves
 - 30 Day Money Back Guarantee
 - 'D' Size Cylinder Standard, Others Available

- 2PL PORTABLE OXY - P/N 13-03366..... **\$475.00**
- 4 PL PORTABLE OXY - P/N 13-03367..... **\$665.00**



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 congestion), 4 ea. Nelson A3 flowmeter/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 carry/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 F1 face masks. This will, however, use much more oxygen. All systems are shipped empty.



Persons	XCP carry-on systems man-hour service time with the Nelson A3 flowmeter and Oxymizer cannula								
	10,000 ft. MSL			14,000 ft. MSL			18,000 ft. MSL		
	XCP 180	XCP 415	XCP 682	XCP 180	XCP 415	XCP 682	XCP 180	XCP 415	XCP 682
1	10:00	23:00	37:53	05:27	12:35	22:40	03:51	08:51	14:34
2	05:00	11:30	18:56	02:43	06:17	10:20	01:55	04:25	07:16
3	03:00	07:40	12:37	01:49	04:11	06:52	01:16	02:58	04:51
4	02:30	05:45	09:28	01:22	03:08	05:10	00:57	02:12	03:38

- XCP-682-4P-FP:** 682 liter (24 cu.ft.) 4-pl. carry-on system w/**Full-Pack** padded cylinder carry/case 13-03657 **\$748.95**
- XCP-682-2P-FP:** 682 liter (24 cu.ft.) 2-pl. carry-on system w/**Full-Pack** padded cylinder carry/case 13-03658 **\$625.00**
- XCP-682-1P-FP:** 682 liter (24 cu.ft.) 1-pl. carry-on system w/**Full-Pack** padded cylinder carry/case 13-03659 **\$450.95**
- XCP-415-4P-FP:** 415 liter (15 cu.ft.) 4-pl. carry-on system w/**Full-Pack** padded cylinder carry/case 13-03660 **\$711.00**
- XCP-415-2P-FP:** 415 liter (15 cu.ft.) 2-pl. carry-on system w/**Full-Pack** padded cylinder carry/case 13-03661 **\$584.00**
- XCP-415-1P-FP:** 415 liter (15 cu.ft.) 1-pl. carry-on system w/**Full-Pack** padded cylinder carry/case 13-03662 **\$449.95**
- XCP-180-1P-FP:** 180 liter (6 cu.ft.) 1-pl. carry-on system w/**Full-Pack** padded cylinder carry/case 13-03653 **\$450.95**



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 & gauge, face mask, two 18-liter non-refillable replacement cylinders, and an instruction manual. Options include additional cylinders, Oxymizer cannula, & holster pack. P/N 13-01016 **\$199.95**

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 9 modes of operation. All systems shipped empty.

- TR-95 Transfilling unit w/ variable flow transfer, fitting bleed valve and pressure/contents gauge **P/N 13-03925 \$258.95**
- TR-75 Transfilling unit w/ "O" ring fittings and bleed valve **P/N 13-03924 \$159.95**
- TR-55 Transfilling unit with hand grip knob **P/N 13-03923 \$74.00**



Persons	MAN-HOUR SERVICE TIME WITH CYLINDER @ 1,800 PSIG. WITH EDS UNIT(S) USING CANNULA'S OR FACE MASK(S)								
	10,000 ft. MSL			15,000 ft. MSL			18,000 ft. MSL		
	EDS 011	EDS 022	EDS 040	EDS 011	EDS 022	EDS 040	EDS 011	EDS 022	EDS 040
1	31:06	62:18	113:12	19:05	38:04	69:10	14:24	28:50	52:24
2	15:33	31:09	56:36	09:32	19:02	34:35	07:12	14:25	26:12
3	10:37	20:45	37:44	06:21	12:41	23:03	04:48	09:36	17:28
4	07:45	15:34	28:18	04:46	09:31	17:15	03:36	07:12	13:05

- EDS-022-FP:** Kevlar fiber-wound cylinder, EDS unit, XCR regulator, cannula, face mask, **Full-Pack** & tote bag P/N 13-03665 **\$1,645.00**
- EDS-011-FP:** Kevlar fiber-wound cylinder, EDS unit, XCR regulator, cannula, face mask, **Full-Pack** & tote bag P/N 13-03666 **\$1,078.00**
- EDS-480-FP:** Glass fiber-wound cylinder, EDS unit, XCR regulator, cannula, face mask, **Full-Pack** & tote bag P/N 13-03667 **\$1,120.00**
- EDS-180-FP:** Aluminum cylinder, EDS unit, XCR regulator, cannula, face mask, **Full-Pack** & tote bag P/N 13-03668 **\$875.00**
- EDS-040-2P-TF:** Kevlar fiber-wound cyl., 2 EDS units, XCR regulator, cannula, face mask, **Tuff-Pack** & tote bag P/N 13-03670 **\$2,255.00**
- EDS-022-2P-FP:** Kevlar fiber-wound cyl., 2 EDS units, XCR regulator, cannula, face mask, **Full-Pack** & tote bag P/N 13-00371 **\$2,260.00**
- EDS-415-2P-FP:** Aluminum cylinder, 2 EDS units, XCR regulator, cannula, face mask, **Full-Pack** & tote bag P/N 13-03672 **\$1,376.00**
- EDS-480-2P-FP:** Glass fiber-wound cyl., 2 EDS units, XCR regulator, cannula, face mask, **Full-Pack** & tote bag P/N 13-02389 **\$1,629.00**
- EDS-D1:** Unit only, (less regulator) P/N 13-02389 **\$724.00**
- EDS-D1:** Kit with XCR regulator P/N 13-02390 **\$755.00**
- EDS-D1:** Kit with XCR gauged regulator P/N 13-02391 **\$840.00**
- EDS-D1:** Kit with XCR-DIN regulator P/N 13-02392 **\$989.00**
- EDS-D1:** System with CFF-480 cylinder (1 place) P/N 13-02387 **\$1,040.00**
- EDS-D1:** System with CFF-480 cylinder (2 place) P/N 13-02388 **\$1,630.00**



AIRCRAFT SPRUCE WEST
CORONA, CA • (877) 4-SPRUCE

596
Prices Subject to Change Without Notice

AIRCRAFT SPRUCE EAST
PEACHTREE CITY, GA • (877) 477-7823

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.....\$33.95



MOONEY - A simple "T" handle design for the Mooney axle. Overall length 33.5".
P/N 13-02000.....\$33.95



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.....\$33.95



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.....\$33.95



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.....\$33.95



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.....\$36.95



TWIN PIPER - This model is a telescoping design. The tow bar uses twin hooks with spring pins for a positive lock. Overall length 49", collapsed 30". P/N 13-01778.....\$36.95



COMANCHE - The same as above except one piece construction. Overall length 33".
P/N 13-02100.....\$33.95



DELUXE CESSNA - Our most popular tow bar. Fits Cessnas with 5/8" lugs on nose gear. Uses lever action spring loaded forks for ease of operation. Overall length 48", collapsed 28".
P/N 13-01540.....\$45.95



DUTCHESS/PIPER - Fits Dutchess and Piper nose gear axle. Telescoping design provides extra nose gear clearance. Overall length 48", collapsed 28". P/N 13-02210.....\$35.95



DELUXE PIPER - This tow bar offers the same features as our P/N13-01600 plus the convenience of a telescoping design. Overall length 42", collapsed 24". P/N 13-01550.....\$44.95



UNIVERSAL TOW BARS

CESSNA/ BEECH/ MOONEY - This universal tow bar is excellent for use with tug, tractor, or by hand. It fits most Cessna 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.....\$134.95

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....\$134.95



SCOTT TAILWHEEL - A tow bar designed for aircraft using a Scott 3000 series tailwheel. Overall length 48", collapsed 28".
P/N 13-02205.....\$44.95



BEECHCRAFT AXLE - This 2-piece tow bar is designed for use in Beechcraft axles. Overall length 48", collapsed 27".
P/N 13-02215.....\$35.95



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.....\$45.95



ERCOUBE - Specially designed for Ercoupes. This tow bar has a spring loaded lever action for ease of operation. Overall length 46.5", collapsed 28.5". (for Ercoupe with Dual Fork Nose Gear with 7/8" Axle Cup Only) P/N 13-01580.....\$47.95



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.....\$48.95



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.....\$47.95



DELUXE MOONEY - This deluxe Mooney tow bar is a longer collapsible version than our standard Mooney. Overall length 41", collapsed 27".
P/N 13-01560.....\$40.95



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.....\$77.25



VIKING - Designed especially for Bellanca Viking axle. Collapsible design and spring loaded fork. Overall length 46.5", collapsed 28.5".
P/N 13-02220.....\$54.25



DELUXE BEECHCRAFT - Spring loaded forks for ease of operation. Overall length 48", collapsed 28".
P/N 13-01905.....\$44.95



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.....\$216.95



AIRCRAFT WINCH

Hook cable to tail tie-down ring and press button. Aircraft Winch easily moves up to 6,000 lbs. rolling weight. Floor or wall mount, 100ft of cable, 75 ft. of control cord, and automatic safety shut-off.
P/N 13-01764.....\$323.95



TOW BARS

BOGERT TOWBARS (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. All bars except 13-01812 are 48" to 52" long extended and 26" collapsed.

Part No.	Model	Aircraft	Price
13-10000	TDG	3200/3400 Scott series tailwheel	\$78.75
13-10030	35	Beech Bonanza also BE-36A180	\$78.75
13-01808	19/23B	Beech Musketeer Series	\$78.75
13-01809	17/30	Bellanca Viking Series	\$78.75
13-10040	172	Cessna 150,152,172,175,177,182	\$78.75
13-10050	210	Cessna 172RG,177RG, 182RG, 210 series	\$107.95
13-10060	206	Cessna 205,206 and 207	\$78.75
13-02407	AA	Gulfstream American AA1 & AA5	\$78.75
13-01810	Moon	Mooney Aircraft	\$78.75
13-10010	24/30	Piper Comanche PA24, PA30, and PA39	\$78.75
13-10020	22/28	PA22 & PA28 series (not PA28R)	\$78.75
13-01812	34	Piper Seneca PA34-200/220/220T handle extends to 67"	\$121.95
13-02408	RV	RV3,RV4,& RV6 with tail wheel	\$78.75
13-01811	RVA	RV6A and RV8A with or without pressure recovery wheel pants	\$78.75
13-02409	Aerostar	Square tube construction. Hand Tow-tug stows easily at a collapsed 37" length, 70" when extended	\$152.00
13-01813	Agusta	Agusta Helicopter.Handle extends to 70"	\$174.95
13-02410	F24	F24, Beech Staggerwing, tailwheel steer	\$104.95
13-02411	Lake	Lake Aircraft nose wheel steering	\$104.95

BRACKETT AIRCRAFT TOWBARS

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 lightweight (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.
 Ring HitchP/N 13-10110\$289.95
 Ball HitchP/N 13-10111\$289.95
 Clevis HitchP/N 13-01884\$289.95

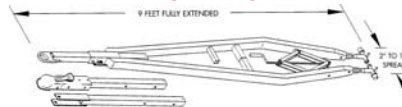
MODEL TR-6



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.

Ring HitchP/N 13-10131.....\$651.00
 Ball HitchP/N 13-10130.....\$651.00

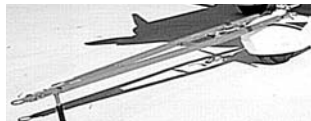
MODEL TR-34



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.
 Ring Hitch (TR-34R)P/N 13-01888\$425.95
 Ball Hitch (TR-34B)P/N 13-01886\$399.95
 Clevis Hitch (TR-34C)P/N 13-01887\$420.95

Optional Tail Wheel Adapters TWA-10 (for Scott tail wheels)
 P/N 13-10089\$41.60

MODEL TH-53 - Features a tow bar



length of 80" to 94" (extended). Wt: 22 lbs., Max. aircraft Wt: 7,000 lbs. TH-53R Towbar w/Ring hitch

P/N 13-01886\$399.95
 TH-53B Towbar w/Ball hitchP/N 13-01887\$420.95
 TH-53C Towbar w/Clevis hitchP/N 13-01888\$425.95

MODEL TR-71, 72, & 73



Lightweight aluminum designed for Waco, Stearman, & Cessna 195 type aircraft. Length: 100", Spread: 90", Wt: 22 lbs. Hook dia: TR-71 (.850), TR-72 (1.25)

TR-71B Towbar w/Ball hitchP/N 13-01907\$558.00
 TR-72B Towbar w/Ball hitchP/N 13-01908\$558.00
 TR-73B Towbar w/Ball hitchP/N 13-01909\$558.00
 TR-71R Towbar w/Ring hitchP/N 13-01910\$558.00
 TR-72R Towbar w/Ring hitchP/N 13-01911\$558.00
 TR-73R Towbar w/Ring hitchP/N 13-01912\$558.00

CUSTOM TOWBARS & OPTIONS FOR UNIVERSAL TOWBARS

Model	Description	Part No.	Price
T-MU2-10	Kit-Crank & head assembly for converting TR-34 to TR-44	13-01890	\$144.40
TWA-10	Scott Tail wheel adapter (2 pcs req.)	13-10089	\$41.60
TWA-11	Tail wheel adapter for DGA-Staggerwing (2 pcs req.)	13-01891	\$43.00
T-4W	Wheel set (set of 2) for TR-34	13-01892	\$96.00
T-375	Adapter .375" for Aerospatiale-Trinidad, Tabago(2pc.)	13-01893	\$35.90
T-475	Adapter .475" Outer Diameter (2 pcs req.)	13-01894	\$35.90
T-625	Adapter .625" for Augusta 109 & Others (2 pcs req.)	13-01895	\$35.90
T-750	Adapter .750" for Commander114, S-76 & other	13-01896	\$35.90
T-Maule	Adapter for Maule Tail Spring (1 pc. req.)	13-01897	\$75.00
T-34-04	Shock absorbing ring hitch (1 pc. req.)	13-01899	\$140.95
PJ-1	Prop Jack; 46" to 69"; 31 lbs.	13-01901	\$462.00
TR-PC	Towbar; Pilatus PC-12, 3 pcs., 30 lbs.	13-01686	\$569.00
TR-PCS	Towbar; Pilatus PC-12, Single pcs., 19 lbs.	13-01903	\$328.95
TR-S2	Towbar; Ayres, 3 pcs., 18 lbs.	13-01755	\$335.00
TR-S76	Towbar; Carry-A-Long, Sikorsky S76, 25 lbs.	13-01904	\$609.35

PS

TYGA TOWBARS FOR TURBO PROPS & JETS



Brackett Aircraft's TYGA Towbar line consist of towbars 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 all aircraft

under 75,000 Lb. weights & heavy duty Multi-Link for aircraft with minimum tow weights of up to 125,000 pounds.

Visit www.aircraftspruce.com for description & pricing on these Towbars

TOW BARS

THE TAILDRAGGER 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:

- Patented Design
- No Winches
- No Hydraulics
- No Metal To Metal Contact
- No Adapters Required
- Superior Traction
- 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

DESCRIPTION	PARTS #	PRICE
TAIL DRAGGER HAND POWER ONLY	13-01510	\$149.95
TAIL DRGR TOWBAR HAND/PIN HTCH	13-01520	\$191.95
TAIL DRGR TOWBAR HND/BALL HTCH	13-01530	\$191.95

SIMILAR ITEMS	PARTS #	PRICE
TAIL DRAGGER ELECTRIC	13-01823	\$1,030.00
TAIL DRAGGER DRAGGER GAS	13-01824	\$1,173.00

REDLINE TOW BARS FOR BEECHCRAFT



Power Tow - Made from 4130 steel tubing. Measures 30" long stowed and 48" extended. For Baron, Bonanza, Travel Air. Twin Bonanza requires special model. Designed for hand use or towed by any multi-axle vehicle, but not single axle tugs. P/N 13-01629 **\$296.95**



Wedge-LOC Link - Provides a secure link to any type of tug or existing tow unit without anything touching any exterior surface of the aircraft. For use with single axle tugs or multi axle vehicles. P/N 13-01913 **\$195.00**



Hand Tow - An ultralight, 100% 4130 steel tow bar, this unit uses the unique Wedge-Loc fitting featured on the power tow model. 43.5" extended & 25.25" stowed. For hand use only. P/N 13-01914 **\$195.00**

Duchess Power Tow Bar - 67.3" extended for hand towing, 57.4" extended for Power towing, and 38.1" stowed. P/N 13-01921 **\$280.00**

REDLINE TOW BARS FOR PIPER



Power Tow - Made from 100% 4130 steel tubing. Measures 28" long stowed and 41" extended for towing. For use on Piper Arrow, Lance, Saratoga (RG), Malibu, Mirage, and Seminole models. Special model required for Piper Meridian. Designed for hand use or powered use with any multi-axle vehicle, but not for use with single axle tugs. P/N 13-04199 **\$245.95**



Hand Tow - An ultralight, 100% 4130 steel tow bar, this unit uses the unique Wedge-Loc fitting featured on the power tow model. 43.5" extended and 25.5" stowed. For hand use only. P/N 13-01915 **\$195.00**

Beech Power Tow Adapter.....P/N 13-01918 **\$46.50**
 Cessna Power Tow Adapter.....P/N 13-01919 **\$37.00**
 Power Tow CouplerP/N 13-01920 **\$48.00**

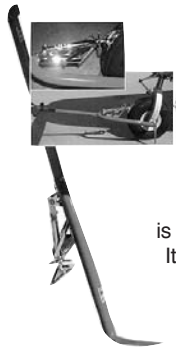
NOSE WHEEL DRAGGER DRAGGER

The Nose Wheel Dragger provides effortless ground handling with a swing gate front roller for easy loading and ten ball bearing rollers which push and guide the nose wheel. It is light weight and easy to maneuver, moves at a slow walking speed, and accepts nose wheels up to 600 x 6 with or without wheel fairings. This unit will give no metal to metal contact, no metal to fiberglass contact, needs no adapters, winches, or hydraulics. Available in gas or electric power models. Add \$70.00 for shipping in continental U.S. Shipped direct from factory to you. Allow 3 weeks.



Gas Powered, 6.5HP (aircraft up to 12,000 lbs) P/N 13-05103 **\$1,173.00**
 Electric Powered, 12V (aircraft up to 3000 lbs) ..P/N 13-05105 **\$1,059.95**
 Electric Powered, 24V (aircraft up to 3000 lbs) ..P/N 13-03205 **\$1,122.00**

REDLINE STIFFY TOW-BAR



The STIFFY is a spring loaded, reversible, one-way ratchet that delivers tremendous power. It will allow the wheel to continue rolling in the direction it is being levered, but it has to be "unlocked" in order to allow movement in the other direction. Traction on the tire is supplied by "teeth" on the "friction pad." It also works well when wet.

The basic system consists of 2 pieces (special one-piece tow bar and the STIFFY mechanism). An optional POWER TOW

ADAPTER is available to pull the plane with a Go-Cart, Tractor, and etc. The Stiffy mechanism will work with our existing BE-3 tow bar with no modifications. Weight 4lbs., Fits in baggage area.

DESCRIPTION	PARTS #	PRICE
STIFFY TOWBAR FOR BEECHCRAFT	13-04064	\$425.00
STIFFY TOWBAR FOR CESSNAS	13-04067	\$425.00
STIFFY TOWBAR FOR CESSNAS	13-04068	\$425.00

ACCESSORIES	PARTS	PRICE
POWER TOW ADAPTER	13-04066	\$49.95

REDLINE TOW BARS FOR CESSNA



Power Tow - Made from 100% 4130 steel tubing. Size: 25.75" long stowed & 44" extended for towing. For use on Cessna 172RG, 182RG, 210, and P210 models.

Designed for hand use or powered use with any multi-axle vehicle, but not for use with single axle tugs. P/N 13-04195 **\$245.95**

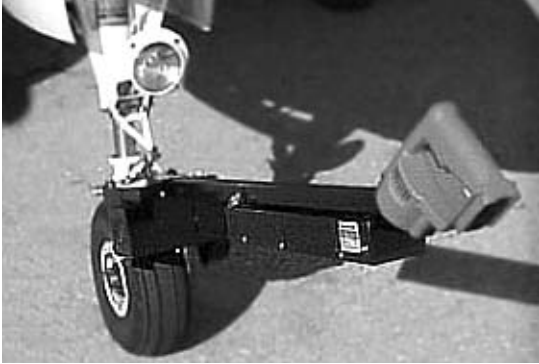


Hand Tow - An ultralight, 100% 4130 steel tow bar, this unit uses the unique Wedge-Loc fitting featured on the power tow model. 43.5" extended & 25.5" stowed. For hand use only. P/N 13-01917 **\$195.00**



TOW BARS

ROBOTOW PORTABLE TOWBAR



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 power towbar for the aircraft!

Millenium Model Cordless Kit

- Cordless 18 Volt Robotow
- 5 Amp Robopak (moves plane 400 ft. on a single charge)
- Robocharge (automatic international 120V AC input/18VDCoutput)
 - PN 13-04222 (Domestic)
 - PN 13-03896 (International)

Millenium Model Corded Kit

- Corded 120 Volt Robotow
- 80 ft. Extension Cord
- GFI P/N 13-03897

Accessories

- 5 Amp 18 Volt Robopack Battery P/N 13-03898
- Robotow 18 Volt Charger P/N 13-03899
- 80 ft. Extension Cord P/N 13-03901
- GFI P/N 13-03902
- International 220V/110V Transformer Kit Travel Pack P/N 13-03903


Airplane Adapters (Sold Separately)

- Aero Commander Adapter P/N 13-03904
- Beech 1 / Baron, Bonanza, Debonair Duke / Trav. Air Adapters P/N 13-03905
- Beech 2 / Queen Air, Twin Bonanza Trigear 18 Adapters P/N 13-03901
- Cessna 1 / 150, 172, 182, 310, 340 Adapters P/N 13-03902
- Cessna 2 / 310R, 401, 414, 421 Adapters P/N 13-03903
- Cessna 3 / 182RG before 1962, 206, 210 before 1962 Adapters P/N 13-03904
- Cessna 4 / 337, 303 Adapters P/N 13-03905
- Cessna 5 / 182RG & 210 from 1962-1986 Adapters P/N 13-03901
- Piper 1 / Apache, Comanche, Aztec, Navajo, Twin Com, Bellanca P/N 13-03902
- Piper 2 / Colt, Cherokee, Tri-Pacer Adapters P/N 13-03903
- T28 Trainer Adapter P/N 13-03904
- Navion Adapter P/N 13-03904
- Commander 114B Adapter P/N 13-03904
- Cessna Caravan Adapter P/N 13-03904
- Trinidad Adapter P/N 13-03904

Note: The Robotow only fits aircraft that do not have wheel pants.

DESCRIPTION	PARTS #	PRICE
ROBOTOW 6302 18V TOWBAR CORDLS	13-03896	\$968.00
ROBOTOW CORDED TOWBAR 120 VOL	13-03897	\$853.50
ROBOTOW 5AMP/18V BATTERY	13-03898	\$145.00
ROBOTOW 18 VOLT CHARGER	13-03899	\$67.00
ROBOTOW 18 FT EXTENSION CORD	13-03901	\$37.00
ROBOTOW GFI	13-03902	\$67.00
ROBOTOW 220V/110V TRANSFORM KT	13-03903	\$31.00
ROBOTOW ADAPTER AERO COMMANDER	13-03904	\$79.00
ROBOTOW ADAPTER BEECH 1	13-03905	\$79.00
ROBOTOW ADAPTER BEECH 2	13-03906	\$79.00
ROBOTOW ADAPTER CESSNA 1	13-03907	\$79.00
ROBOTOW ADAPTER CESSNA 2	13-03908	\$79.00
ROBOTOW ADAPTER CESSNA 3	13-03909	\$79.00
ROBOTOW ADAPTER CESSNA 4	13-03910	\$79.00
ROBOTOW ADAPTER CESSNA 5	13-03911	\$79.00
ROBOTOW ADAPTER PIPER 1	13-03912	\$79.00
ROBOTOW ADAPTER PIPER 2	13-03913	\$79.00
ROBOTOW ADAPTER T28 TRAINER	13-03914	\$79.00
ROBOTOW ADAPTER NAVION	13-03915	\$79.00
ROBOTOW ADAPTER COMMANDER 114B	13-03916	\$79.00
ROBOTOW ADAPTER CESSNA CARAVAN	13-03917	\$79.00
ROBOTOW ADAPTER TRINIDAD	13-03918	\$79.00
ROBOTOW 6356 18V TOWBAR CORDLS	13-04222	\$968.00

TOW BUDDY CORDLESS POWERED TOW BAR



The speed can be adjusted by dialing in the desired setting right from the control handle. This type of speed control is essential for tight hangar configuration. Other convenient features are the nose gear quick connect and the height adjustment for the attach forks and handle. Unlike most gas powered towbars, this unit's power comes from a 12V battery. This eliminates trips to the gas station, tune-ups, oil changes, and cold weather hard starting problems. Add shipping. P/N 13-02300.....\$235.95

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 13-02300.....\$235.95



TIE-DOWNS

M.A.S. TIE-DOWN SYSTEM



Advanced Aircraft Anchoring System – The Claw® Aircraft Tiedown kit comes complete with three earth 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 13-01675\$49.85

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\$138.95

FLOPLOC UNIVERSAL TIE DOWN CLEAT



Secure any rope, line or cord of various size with NO knots needed. The FlopLoc is strong enough for a tie-down on aircraft, boats and trucks. 2 FlopLocs included per package.

P/N 13-01944\$8.35

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.....\$16.40

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 ring. 2 rivnuts and 2 countersunk with a stainless ring. 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\$29.95

E-Z LOCK TIE DOWNS



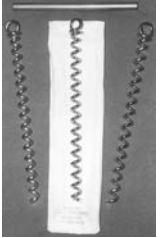
EZ-Lock Tie Downs feature a braid slip lock which provides excellent tie-down security without the need to tie any knots. P/N 13-00159\$15.85

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 13-00663\$38.40

M.A.S. TIE-DOWN SYSTEM



The M.A.S. Aircraft tie-down system is the strongest, most durable and easiest system to use in the world. Built of S.A.E. 1065 tempered spring steel rated at over 190,000 psi and plated in zinc chromate for corrosion resistance, the M.A.S. system will last for generations. With a 1.25" diameter and 12" drive handle, each tie-down can be driven into the earth with a maximum leverage offering ease of installation. The M.A.S. tie-down gives 15 sq. inches of steel in contact with undisturbed earth. Wt: 3.8 lbs. P/N 13-01675\$49.85

SECURIT TIE-DOWN



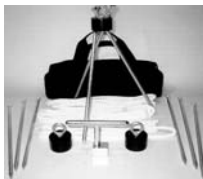
Super-strong and simple to use, Securit has a unique braid lock that provides holding action automatically, even when the line is slack. It releases quickly and easily, but positively will not release by itself. Adjustable to 100". Tensile strength of the polypropylene rope exceeds 4000 lbs. Hooks are cadmium plated.

Rope is resistant to water, oil and gas. P/N 13-22750\$22.85
Wt. 19 oz.

LESS 10% FOR 3 OR MORE.

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 3 eas. Delrin hubs, 9 eas. 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\$99.95

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\$0.29 /Ft.
1/2" Rope (6250 lb. test)P/N 13-05500\$0.54 /Ft.
15% Discount on 100 ft.

Tie-down bar is guaranteed for 10 years under normal use.

When making your own length of tie-downs, add at least 30" for rope reversal and knots.



HOOK-N-PULL TIE DOWNS

Hook-N-Pull Tie downs feature closed end "s" 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 wingP/N 13-00448\$13.70
Low wing or tailP/N 13-00449\$12.50

THE FITZHOOK TIE DOWN SYSTEM



"The Fitzhook", a heavy duty tie down system that is reliable and easy to use. Successfully tested on all sizes of aircraft. The system consists of: 3 heavy gauge stainless steel hooks, two 9' and one 6' sections of heavy duty plated chain, 3 bolts to secure the chain to the tie down rings in the concrete, 3 rings (2.25") to retain the hook on the chain and an instruction pamphlet. 'The Fitzhook' can also be ordered with a plastic coating to eliminate scratching the aircraft's tie down ring, or the aircraft. A padlock can be used in place of a bolt to secure the chain to the ground to prevent theft. Wt 12 lbs.

P/N 13-22950\$89.95

CHOCKS — WINDSOCKS FRAMES

CHOK-LOK AIRCRAFT SECURITY LOCK



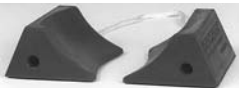
Consisting of a nylon coated, high grade steel caliper, padlocked to an integral pair of chocks, "Chok-Lok" provides an effective means of securing your aircraft by simply chocking and locking the nose wheel.

Development of "Chok-lok" was inspired by a desire to improve security, and safety, of general aviation aircraft by reducing the potential for unlawful or unauthorised use.

The design employs simple manufacturing techniques allowing application of the device to the wide variety of wheel assemblies utilised on aircraft today. This flexibility ensures that the device will provide maximum security from a well-tailored fit without the need for expensive re-tooling. Being difficult to forcibly remove, without rendering the aircraft immovable, the design overcomes one of the major disadvantages of "one size fits all". The tight chocking assembly further prevents accidental damage to the aircraft if taxiing is attempted whilst the device is still installed. Chok-Lok Kit includes Calliper, Chock Assembly, Quality Padlock, and a Tough Handy Storage Bag. Chok-Loc is available for standard 5" & 6" wheels. Metroliners, Brasilias, Lear 35/36, KingAir, QueenAir, Citation, Astra, Westwind. Pilatus PC-12 uses the 6" Chok-Lok. Chok-Lok's do not work on wheels with wheel pants.

Flight Schools & FBO's: order min. 5 Chok-Lok's & request same key to open all the locks (Special Order)

DESCRIPTION	PARTS #	PRICE
CHOK-LOK 5.00-5	13-03708	\$289.00
CHOK-LOK 6.00-6	13-03709	\$289.00
CHOK-LOK 6.50-10	13-03710	\$289.00
CHOK-LOK 22 X 6.75-10	13-03711	\$289.00
CHOK-LOK 16/18 X 4.4 STANDARD	13-03712	\$289.00
CHOK-LOK 16/18 X 4.4 DT	13-03713	\$289.00
CHOK-LOK 16/18 X 4.4 DDT	13-03714	\$289.00
CHOK-LOK 16/18 X 4.4 DDT GRAVL	13-03715	\$319.00
CHOK-LOK 8.50-10 STANDARD	13-03716	\$319.00
CHOK-LOK 8.90-12.5 STANDARD	13-03717	\$319.00



MOLDED WHEEL CHOCKS

The "Perfect" lightweight orange urethane aircraft wheel chocks. Oil and chemical resistant and connected by a 22-inch nylon rope. Concave design that fits into tire. Larger sizes available. P/N 13-03550\$19.95



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"x.5" & weighs just 4 oz. A 14' lanyard is attached. Mini-ChocksP/N 5229\$18.50



WINDSOCK FRAMES

Totally enclosed housing prevents 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 threaded pipe.

6" dia.	P/N 13-20120.....	\$27.50
9" dia.	P/N 13-20121.....	\$34.90
10" dia.	P/N 13-20122.....	\$48.30

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 or yellow finish. Elastic cord holds chock securely in place. Available in 3 sizes.

- SMALL:** 1-1/2" x 1-1/2" x 6"P/N 13-01120 (-R or -Y) ..\$15.80
- MEDIUM:** 2" x 2" x 8"P/N 13-01130 (-R or -Y) ..\$17.80
- LARGE:** 4" x 4" x 8"P/N 13-01140 (-R or -Y) ..\$25.80

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\$19.95
- Chocks w/ your N# or company nameP/N 13-01766.....\$23.95



RUBBER WHEEL CHOCKS

These ribbed rubber wheel chocks measure 4"x4"x8" and have reflective tape on all three sides. Connected by 3 ft. of nylon rope. Very popular with corporate operations & FBOs

P/N 13-01767\$54.25



JACK MOUNT PAD

Jack mount pad for spring gear Cessnas. Slides on spring gear leg to allow use of jack to lift wheel. Wrap around design keeps pad from slipping off.P/N 12-01410\$79.50

CHOCK-LITE CHOCK SYSTEM



Here is a lightweight chock system that wont put "out of the envelope." Made of lightweight closed-cell foam thats durable, water-proof, and impervious to most oils and chemicals. Long lasting with ultra-violet protection. Perfect for unattended airports. Only 15 oz. per pair.

- 18" dia.....P/N 13-03480.....\$364.95
- 20" dia.....P/N 13-02044.....\$382.95
- 24" dia.....P/N 13-02045.....\$464.95
- 36" dia.....P/N 13-02046.....\$675.00

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.

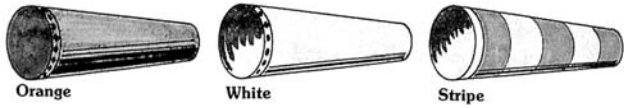


- 18" dia.....P/N.....13-02043.....\$364.95
- 20" dia.....P/N.....1302044.....\$382.95
- 24" dia.....P/N.....13-02045.....\$464.95
- 36" dia.....P/N.....13-02046.....\$675.00

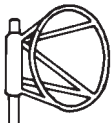
PS

WINDSOCKS

SCOTT'S WINDSOCKS



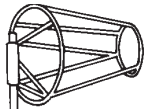
THROAT DIAMETER	LENGTH	PART # BRIGHT ORANGE	PART # INTENSE WHITE	PRICE	PART # STRIPE	PRICE
8"	30 INCH	13-04147		\$21.50		
10"	36 INCH	13-02026		\$22.65		
13"	55 INCH	13-04145		\$22.75		
18"	5 FEET	13-20200	13-20210	\$36.85	13-20220	\$46.40
18"	5 FEET	13-20202	13-20212	\$42.30	13-20222	\$54.00
24"	5 FEET	13-20204	13-20214	\$55.00	13-20224	\$65.25
28"	7 FEET	13-20205		\$55.00	13-20225	\$67.00
36"	10 FEET	13-20206		\$95.25	13-20226	\$105.95
36"	12 FEET	13-20208		\$102.95	13-20228	\$112.95



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.

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.

8"	P/N 13-20229.....	\$36.20
24"	P/N 13-20232.....	\$58.50
10"	P/N 13-20005.....	\$36.70
28"	P/N 13-20234.....	\$58.50
13"	P/N 13-20231.....	\$36.90
36"	P/N 13-20235.....	\$62.50
18"	P/N 13-20230.....	\$41.50

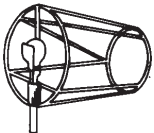
SCOTT'S EXTENDED WINDSOCK FRAMES

The extended frame turns much easier and keeps the windsock headed into the wind like a weathervane. The frame holds the windsock open fully so it will "fly" in lighter winds. Constructed of all welded steel with 2 ball bearings. The frame is mounted to a 1-inch diameter support pipe threaded to fit a 3/4-inch size pipe or conduit. ORDER WINDSOCKS SEPARATELY

18"P/N 13-20244	\$59.75	36"P/N 13-20248 ..	\$147.85
24"P/N 13-20245	\$78.50			

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. The windsock frame is designed to swivel without twisting the wires. The frame has two ball bearings to allow easy movement in light winds.



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 extended frame is sensitive to wind direction changes, especially in light winds. The frame is mounted to a 1-inch diameter support pipe threaded to fit a 3/4-inch size pipe or conduit. ORDER WINDSOCKS SEPARATELY.

13".....	P/N13-20236.....	\$218.95
18".....	P/N 13-20236.....	\$218.95
24".....	P/N 13-20238.....	\$358.95
36".....	P/N 13-20242.....	\$561.00



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 instructions.

Complete Kit.....	P/N 13-03747	\$42.00
Replacement Sock	P/N 13-03745	\$4.95



27" 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	\$53.75
Replacement Sock	P/N 13-20025	\$21.40



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	\$49.60
----------------------	--------------------	----------------

NYLON WINDSOCKS

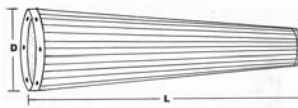


These socks are windtunnel tested and designed for conditions in which safety and wind direction are of greatest importance. They are constructed of nylon oxford cloth for strength and flyability and dyed a bright orange for higher visibility. The throat and tail bands are stitched with multiple rows 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.

P/N	Throat Diameter	Length	Price Each
13-20040	10"	36"	\$23.80
13-20045	18"	48"	\$29.95
13-20050	18"	60"	\$42.90
13-20055	18"	96"	\$46.20
13-20060	36"	144"	\$114.95

AVIATION WINDSOCKS



All Aviation Windsocks are made of heavyweight cross-woven Aviation blend material having special Rip-Stop characteristics, flexible, chemically resistant treated, Polyurethane

Coated for bonding strength and water repellancy, 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 #AC 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.....	\$46.95	20" dia. ..	P/N 13-02039	\$49.95
24" dia. ..	P/N 13-02040.....	\$69.95	28" dia. ..	P/N 13-02041	\$99.95
36" dia.....	P/N 13-02042.....	\$131.95			

EXTRA LONG LIFE WINDSOCKS

These heavy-duty cross-woven nylon windsocks are chemically treated and ultra-violet dyed to resist fading and water damage. Made with nylon support webbing and grommets and furnished in International Bright Orange color.



Diameter by Length	P/N	Price
6" x 18"	13-20110	\$20.70
9" x 30"	13-20111	\$27.70
10" x 36"	13-20112	\$32.20
13" x 48"	13-20113	\$40.60
18" x 60"	13-20114	\$43.30
20" x 60"	13-20115	\$47.30

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" FrameP/N 13-02468**\$449.99**
- 18" FrameP/N 13-00386**\$449.99**
- 20" FrameP/N 13-01050**\$439.00**

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..

- MONTAGUE 16" DX CROSSOVER BIKE P/N 13-01945**\$449.99**
- MONTAGUE 18" DX CROSSOVER BIKE P/N 13-03272**\$449.99**
- MONTAGUE 20" DX CROSSOVER BIKE P/N 13-02458**\$449.99**

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'x3' pack for easy portability & storage.

- 18" FrameP/N 13-01068**\$645.00**
- 20" FrameP/N 13-01069**\$645.00**

WINDJAMMER MOTORIZED FOLDING BICYCLE



Lightweight and Fast
The WindJammer's frame and components are 7005, aircraft-quality aluminum and salt water worthy. The complete bike weighs only a mere 44 lbs. and has a weight capacity of

300 lbs. The high tech 33cc motor propels the bike to speeds in excess of 25 mph. This outstanding bike will also get up to 200 mpg.

Easy Starts The easy prime button and choke lever combined with large pull start grip makes for easy starts time after time.

Smooth and Safe

The WindJammer has a smooth ride due to its full front and adjustable rear suspensions and a large, comfortable, spring seat. Stopping power is provided by the amazingly powerful V-brakes on both front and rear wheels.

Easy to Operate

The patented, chain drive system along with the automatic transmission allows the rider to stop and go without engaging or disengaging the motor. You may also pedal your WindJammer like a regular bike.

Compact and Simple

The WindJammer folds quickly quickly with no tools making it easy to store in the storage compartment of your boat, RV, or private plane. When folded, the bike also fits neatly out of the way at home or at work.
NOTE: The Windjammer Folding Bicycle ships by truck only!



- WINDJAMMER FOLDING BIKE YELLOW P/N 13-04009.....**\$895.00**
- W/INDJAMMER FOLDING BIKE RED P/N 13-04010.....**\$895.00**

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.....**\$449.99**
- 20" Frame.....P/N 13-02936.....**\$439.00**

MONTAGUE HUMMER LX BIKE



The Hummer 24-Speed Mountain Bike uses Montague's patented military folding system developed to allow paratroopers an easy exit from military aircraft with a full size mountain bike. Handcrafted from aircraft grade lightweight aluminum, developed for

extreme riding and able to tackle the roughest terrain, The folding system allows the bike to fold in 3 simple steps in less than 30 secs., for storage in your aircraft or other vehicle.

- 20" Yellow ..13-02459.....**\$665.00**
- 20" Black..13-02469.....**\$665.00**
- 18" Yellow ..13-02460.....**\$696.00**
- 18" Black..13-02470.....**\$677.00**

Montague Accessories - Carrying CaseP/N 13-08406**\$99.95**

HUMMER H3 TACTICAL BIKE



Like the HUMMER H3 vehicle, the H3 Tactical mountain bike utilizes military grade technology. The H3 will get you to the top of the mountain and back in style. Equipped with Shimano Deore LX gears and efficient tires, this bike will take you anywhere. Includes Shimano precision index

shifters for quick gear changes, 2.5" of front suspension with a front disk brake, and tires that handle anything from the neighborhood sidewalk to off road conditions.

DESCRIPTION	PARTS #	PRICE
H3 HUMMER 18" MOUNTN BIKE RED	13-03729	\$649.00
H3 HUMMER 20" MOUNTN BIKE RED	13-03730	\$649.00
H3 HUMMER 18" MOUNTN BIKE GRAY	13-03731	\$649.00
H3 HUMMER 20" MOUNTN BIKE GRAY	13-03732	\$649.00
HUMMER 18" XT MOUNTN BIKE SILVER	13-03733	\$1,895.00
HUMMER 20" XT MOUNTN BIKE SILVER	13-03734	\$1,895.00

PS

DAHON FOLDING BICYCLES

16" PICCOLO DAHON FOLDING BICYCLE



This 3-speed bike folds down to a compact size for carrying in aircraft baggage area and weighs only 26 lbs. Sturdy construction, easy to ride - a must for trips. Without tools it folds down in 12 seconds to a handy 11"x 20"x 28" size which slips easily into baggage compartments, under bus seats or into an auto trunk. 5 yr warranty against frame damage. The world's best selling portable bicycle! **Color:** Root Beer P/N 13-00041 **\$399.95**

20" BOARDWALK-6 FOLDING BICYCLE



This 7-speed bicycle folds quickly to a compact size just slightly larger than the 16 inch model above, and weighs slightly more. A very popular seller, it is a much larger bike when not folded and comes with the additional features of a rear rack and coaster brake in addition to the standard hand brake. **Color:** Green P/N 13-00658 **\$329.95**

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"x 22"x 32", Wt: 26.5 lbs., and folding time is only 10 seconds. **Color:** Blue P/N 13-00043 **\$499.95**

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 **\$539.95**

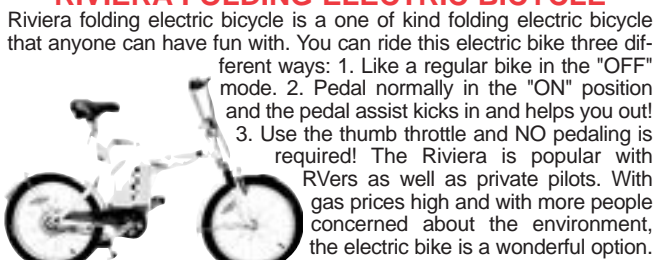
OTHER DAHON FOLDING BIKES

Model	Color	Wheels	Speed	Fold Size	Wt	P/N	Price
Boardwlk-1	Burgundy	20"	1	10"x20"x32"	32	13-00042	\$199.95
Mariner	Ocean Blue	20"	6	12"x22"x32"	30	13-00037	\$359.95
Mariner	Ocean Blue	26"	21	13"x28"x38"	31	13-00038	\$359.95
Vitesse-3	Red	20"	3	11"x22"x32"	26	13-02072	\$499.95
Piccolo	Root Beer	16"	3	11"x20"x30"	-	13-00041	\$399.95
Presto Lite	--	16"	3	11"x20"x30"	-	13-03232	\$599.95
Helios P8	Aluminum	20"	8	11"x23"x33"	-	13-00789	\$599.95
Helios SL	--	20"	8	11"x23"x33"	-	13-03233	\$809.95
Helios XL	--	20"	8	11"x23"x33"	-	13-03234	\$713.00
Mariner	Ocean Blue	20"	6	11"x23"x33"	-	13-00037	\$359.95
Speed P8	Steel Blue	20"	8	14"x23"x33"	-	13-00043	\$499.95
Speed Pro	--	20"	24	14"x20"x30"	-	13-03235	\$809.95
Vitesse	Alum. Red	20"	3	14"x23"x33"	-	13-02072	\$499.95
JetstreamP8	--	20"	8	11"x23"x33"	-	13-03236	\$799.95
JetstreamXP	--	20"	9	11"x23"x33"	-	13-03237	\$989.95
Allegro	--	26"	9	9"x26"x29"bag	-	13-03238	\$1,799.95
Espresso	Dk. Cherry	26"	21	14"x27"x36"	-	13-00791	\$359.95

DAHON ACCESSORIES

Description	P/N	Price	Description	P/N	Price
Kickstand	13-08310	\$5.95	Rear Rack	13-08340	\$11.80
Carry Bag 16"	13-08350	\$42.85	Carry Bag 20"	13-08360	\$48.95
Carry Bag 26"	13-08370	\$65.50			

RIVIERA FOLDING ELECTRIC BICYCLE



Riviera folding electric bicycle is a one of kind folding electric bicycle that anyone can have fun with. You can ride this electric bike three different ways: 1. Like a regular bike in the "OFF" mode. 2. Pedal normally in the "ON" position and the pedal assist kicks in and helps you out! 3. Use the thumb throttle and NO pedaling is required! The Riviera is popular with RVers as well as private pilots. With gas prices high and with more people concerned about the environment, the electric bike is a wonderful option.

.....P/N 13-04070 **\$645.00**

DAHON SPEED D7 FOLDING BICYCLE

Riding a bike has never been this fun. The Speed combines sporty performance with unbelievable value. The frame is hand-welded from custom-drawn 4130 chromoly tubing and incorporates six different patented technologies, resulting in what is probably Dahon's stiffest frame. It features the Dahon Neos rear derailleur, a revolutionary new design that has an ultra short cage for improved ground clearance and super fast shifting. Dahon paired the Neos with an 11-30T cassette, which, when compared with the previous 14-28T freewheel, represents a 37% increase in gear range. Sleek, simple and excellent value - just what most people want in a folding bike. Moroccan

Blue 27.1lbs
DAHON SPEED D7 7 SPEED P/N 13-04094 **\$645.00**

DAHON CADENZA FOLDING BICYCLE

The Cadenza is a full-size 16 SPEED road bike which is ideal for long range riding on asphalt. With its skinny tires and lightweight aluminum frame and components, the Cadenza is a fast road bike which affords the rider an upright posture. Features include carbon-wrapped aluminum handle bar and ergonomic bar ends, quick release folding stem, and alloy rims with stainless spokes. P/N 13-04062 **\$645.00**

FUN CRUZ'N PORTABLE SCOOTER

Built with highest quality parts • Subaru Robin 4-stroke engine • Quiet, smooth, and "Subaru" long life • Meets California & Federal emissions • No mixing fuel/enclosed tank for 85 mi. • Foldable handlebars & adjustable seat • Compact and light for stowing • Rear "cruising" suspension • Front & back disk brakes • Quiet long-life belt drive • Many "cruising accessories." P/N 13-03273 **\$560.00**



HANDY BIKE

Handy Bike features German engineering and all aluminum construction. It is extremely lightweight (17.6 lbs.) and ultra small when folded. It is smaller than other bikes when folded and will fit into small baggage compartments such as a Lancair or Cirrus. Takes up very little trunk space. It is single speed only (52/7 gear ratio) for short commutes, and features racing bike front, rear caliper brakes, and small air filled tires (85psi). It will carry up to 200 lbs. and is ideal for private aircraft owners and their passengers. P/N 13-02206 **\$299.95**



Carry BagP/N 13-02207 **\$35.00**

TRAVEL SCOOT

Incredibly small folding size 33" x 12" x 10". Fits where no mobility scooter has fit before. Made of aircraft-grade aluminum. Weighs only 47 lbs. including the 24V 12Alt battery, basket, and carrying bag. Set up time less than one minute. Heaviest part is only 20 lbs. Supports 260 lbs plus some luggage. Speed 7 mph & 8 miles percharge. Battery approved for airline transport. P/N 13-03635 **\$1,195.00**



PS

PARACHUTES

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. x 24" long. 14 lbs.

P/N 13-03505-X\$1,575.00

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. x 23" long. 13 lbs.

P/N 13-03510-X\$1,575.00

LONG-SOFTIE

Specifically designed for today's high-tech soaring machines and aerobatic aircraft which have little if any cockpit room. The Long-Softie comes complete with a steerable conical canopy designed for 240# maximum suspended weight. System size and weight 2"x15" w. x 35" long. 15 lbs.

P/N 13-03515-X\$1,625.00

SOFTIE-SEAT PACK

Container and harness only. Order a parachute separately or specify type of parachute you have to make sure container is suitable size.

P/N 13-03520-X\$1,585.00

WEDGE-SOFTIE

A wedged shaped version of the popular MINI-SOFTIE and MICRO-SOFTIES. The WEDGE-SOFTIE is designed specifically to add lumbar and sacral support during high positive "G" maneuvers. Ideal for the upright scating found in Pitts style seating. Specifications: 3" thick at bottom, 1/2" thick at top x 14" wide x 24" long. Canopy Type: Steerable Conical*. Total weight: 14 lbs.

P/N 13-03524\$1,575.00

NOTE: Complete the Part Number with Color (-1) Red, (-2) Black (-3) Royal Blue, (-4) Navy Blue, (-5) Grey, (-6) Sage Green or (-7) Olive Drab. Also complete P/N with "C" for Conventional or "A" for Aerobatic. Example: P/N 13-00000-5A.

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, all canopies use high profile design. High stressed areas are reinforced with Kevlar. The pack design allows greater movement in and around the aircraft. Highly recommended by Aerobatic Champions Leo Loudenslager and Patty Wagstaff. Available in five standard colors: Navy blue with Gold, Navy Blue w/Red, Red w/Black, Royal Blue w/Sky Blue and Black w/Silver.



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.

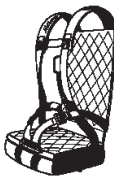
Standard design includes a tapered width and teardrop shape that hugs the back and also provides comfortable lower lumbar support

Size	Length	Width Top	Width Bottom	Thickness Upper Back	Thickness Lower Lumbar	Part No.	Price
360*	22"	13"	15"	1-3/4"	1-3/4"	13-03300	\$1,234.00
425*	22"	13"	15"	1-3/4"	2"	13-03200	\$1,289.00
490*	22"	13"	15"	1-3/4"	2-1/4"	13-03400	\$1,378.00

*360 = Recommended Pilot Weight is up to 177 lbs.

*425 = Recommended Pilot Weight is up to 208 lbs.

*490 = Recommended Pilot Weight is up to 241 lbs.



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).

Comes with TT adapters or two B12 snaps. Quick ejector snaps available (special order).

Size	Length	Width Top	Width Bottom	Thickness Upper Back	Thickness Lower Lumbar	Part No.	Price
360*	22"	13"	15"	1/4"	2-3/4"	13-03411	\$1,283.00
425*	22"	13"	15"	1/4"	3-1/4"	13-03412	\$1,329.00
490*	22"	13"	15"	1/4"	3-1/4"	13-03413	\$1,276.00

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.



Size	Length	Width Top	Width Bottom	Thickness Upper Back	Thickness Lower Lumbar	Part No.	Price
360*	40"	13"	15"	1-3/4"	2"	13-03421	\$1,283.00
425*	40"	13"	15"	1-3/4"	2-1/4"	13-03422	\$1,329.00
490*	40"	13"	15"	1-3/4"	2-1/2"	13-03423	\$1,373.00

PARA-CUSHION EMERGENCY PARACHUTES



Each Para-Cushion system features the patented Pop-Top type container with the externally mounted pilot 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 26 ft diameter MID-LITE canopy freshly packed by an FAA licensed parachute rigger. Every system is delivered in a matching carrying bag with the complete service manual, ready for flight.

PARA-CUSHION BACK™ - The Model 303 parachute assembly is the most popular model and used by warbird, sailplane & aerobatic pilots. The back-mounted container conforms to the curve of your shoulders, and is only 24" (60 cm) tall by 16" (40 cm) wide and less than 3" (7 cm) thick. The Model 303 weighs approximately 15 lbs. (6.5 kg.). It is recommended when head space is at a minimum, such as Christen Eagle & Grob. P/N 13-03440\$1,445.00

PARA-CUSHION CHAIR™ - 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 sailplanes 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\$1,345.00

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-foam™ padded Travel Cushion is an optional accessory. P/N13-03441\$1,585.00

OPTIONS

Fully adjustable harness ..\$100.00	Quick ejector snaps....\$120.00
Capewell riser releases\$85.00	Oxygen pocket\$25.00
Sheepskin backpad\$155.00	

AIRCRAFT SPRUCE WEST
CORONA, CA • (877) 4-SPRUCE

606
Prices Subject to Change Without Notice

AIRCRAFT SPRUCE EAST
PEACHTREE CITY, GA • (877) 477-7823

PS

CHECKLISTS

SURECHECK CHECKLIST



These versatile checklists cover all aspects of pre-flight, 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.

Model	Part #	Price	Model	Part #	Price
PIPER			CESSNA		
Tomahawk	13-09708	\$14.95	C-177	13-09731	\$14.95
Cher 140	13-09709	\$14.95	C-182	13-09732	\$14.95
Cadet	13-09710	\$14.95	C-206	13-09733	\$14.95
Warrior II	13-09711	\$14.95	C-210	13-09734	\$14.95
Archer II	13-09712	\$14.95	C-172RG	13-09735	\$14.95
Arrow II	13-09713	\$14.95	C-182RG	13-09736	\$14.95
Arrow III	13-09714	\$14.95	C-177RG	13-09737	\$14.95
Arrow IV	13-09715	\$14.95	BEECH		
Cher "six" 260	13-09716	\$14.95	Debonair A33	13-09738	\$14.95
Cher "six" 300	13-09717	\$14.95	Debonair B33	13-09739	\$14.95
Saratoga	13-09718	\$14.95	Debonair C33	13-09740	\$14.95
Lance	13-09719	\$14.95	Bonanza F33A	13-09741	\$14.95
Seminole	13-09720	\$19.95	Bonanza V35	13-09742	\$14.95
Seneca I	13-09721	\$19.95	Bonanza A36	13-09743	\$14.95
Seneca II	13-09722	\$19.95	Duchess 76	13-09744	\$19.95
Seneca III	13-09723	\$19.95	Baron 55	13-09745	\$19.95
Seneca IV	13-09724	\$19.95	Baron 58	13-09746	\$19.95
Aztec E	13-09725	\$19.95	OTHER		
Aztec F	13-09726	\$19.95	Katana DA 20	13-09747	\$14.95
CESSNA			Commander 114	13-09748	\$14.95
C-150	13-09727	\$14.95	Mooney M20C	13-09749	\$14.95
C-152	13-09728	\$14.95	Mooney 201	13-09750	\$14.95
C-172	13-09729	\$14.95	AA-5B Tiger	13-09751	\$14.95
C-172XP II	13-09730	\$14.95	Tabago	13-09752	\$14.95

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\$1.25

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 6-1/4" P/N 13-09754\$3.95

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\$3.95

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\$16.95

V BOOK

Small notebook with V-Speeds and approach Speeds. Perfect for Flight Schools, and Renters. P/N 13-09757\$14.95

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\$3.95

CHECKRIDE CHECKLISTS

Private pilotP/N 13-00051\$9.95
 InstrumentP/N 13-00052\$9.95
 CommercialP/N 13-00053\$9.95

ECHO ELECTRONIC CHECKLISTS FROM SURECHECK



Echo, which stands for Electronic Checklist Organizer, is software for your Palm Computing or Palm-compatible device tailored specifically to your model of aircraft. Take the aircraft data pilots have come to depend on in Surecheck printed checklists and add the versatility and popularity of the Palm handheld organizers and you have one powerful cockpit organizational tool.

- Data specifically tailored to your aircraft model
- Cruise Profile information
- V-speed table and aircraft profile information
- Built-in conversion calculator
- Frequency table to record frequencies for airports
- Professionally designed with large buttons for use without a stylus
- Simple one-step installation from Windows or Macintosh. Full manual included.

Part No.	Description	Price ea.
13-00743	ECHO Checklist Beech Debonair	\$29.95
13-00744	ECHO Checklist Beech Bonanza	\$29.95
13-00745	ECHO Checklist Beech Bonanza V35	\$29.95
13-00747	ECHO Checklist Cessna 152 78-85	\$29.95
13-00749	ECHO Checklist Cessna 172RG	\$29.95
13-00750	ECHO Checklist Cessna 172XP11	\$29.95
13-00751	ECHO Checklist Cessna 177B	\$29.95
13-00753	ECHO Checklist Cessna 182 Basic	\$29.95
13-00754	ECHO Checklist Piper Archer 11	\$29.95
13-00755	ECHO Checklist Cessna 182RG	\$29.95
13-00759	ECHO Checklist Piper Arrow 111	\$29.95
13-00760	ECHO Checklist Piper Arrow IV	\$29.95
13-00761	ECHO Checklist Piper Cadet	\$29.95
13-00763	ECHO Checklist Piper Cherokee	\$29.95
13-00766	ECHO Checklist Piper Cherokee 6-620	\$29.95
13-00767	ECHO Checklist Piper Cherokee 6-300	\$29.95
13-00768	ECHO Checklist Piper Saratoga	\$29.95
13-00769	ECHO Checklist Piper Tomahawk	\$29.95
13-00770	ECHO Checklist Piper Warrior II	\$29.95
13-00771	ECHO Checklist Beech Baron A/B55	\$29.95
13-00775	ECHO Checklist Beech Duchess	\$29.95
13-00776	ECHO Checklist Piper Aztec C/D/E	\$29.95
13-00777	ECHO Checklist Piper Aztec F	\$29.95
13-00778	ECHO Checklist Piper Seneca I	\$29.95
13-00779	ECHO Checklist Piper Seneca II	\$29.95
13-00780	ECHO Checklist Piper Seneca III*	\$29.95
13-00781	ECHO Checklist Piper Seneca III**	\$29.95
13-00782	ECHO Checklist Piper Seneca IV	\$29.95

* 1975 - 1981; ** 1981 - 1993

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\$14.95



CHECKLISTS

CHECKMATE CHECKLISTS



Checkmate is the only checklist that contains virtually all data desired by pilots to fly the airplane while excluding 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 200 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"x9" size.

Cessna 150	13-08605	Piper Tomahawk	13-08650
Cessna 152	13-08610	Piper Cherokee 140	13-08655
Cessna 172 F, G	13-08612	Piper Cherokee 180	13-08656
Cessna 172 M	13-08615	Piper Warrior II	13-08665
Cessna 172 N	13-08620	Piper Archer II	13-08670
Cessna 172 P	13-08625	Piper Arrow II	13-08675
Cessna 172 rg	13-08635	Piper Arrow III	13-08680
Cessna 177	13-08636	Piper Cherokee 235	13-08685
Cessna 177 rg	13-08637	Piper Seminole	13-08690
Cessna 182 e,l,m	13-08638	Piper Seneca II	13-08695
Cessna 182 p	13-08639	Beechcraft Sundowner	13-08696
Cessna 182 q	13-08640	Beechcraft Debonair C33	13-08697
Cessna 182 r	13-08641	Beechcraft Bonanza S35	13-08698
Cessna 182 rg	13-08645	Beechcraft Bonanza A36	13-08699
		Mooney 201 (M20S)	13-08700

Checkmate ChecklistsAll Models**\$15.95 - \$16.95**
 Checkmate Universal SimpleP/N 13-08705**\$14.95**

CHECKMATE IFR



In the IFR environment organization and management lead to smoother, stress-free and safer outcomes. CheckMate IFR will assist you through preflight planning to touch-down on the IFR flight. Whether you are cleared for the complete approach or radar vectored to the FAF, CheckMate IFRs format will help 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 before flight will help you determine pilot and 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**\$14.95**
 Compact (5" x 7")P/N 13-08810**\$12.95**

SURVIVING THE FIRST 24 HOURS CHECKMATE®



Surviving the First 24 Hours CheckMate® clearly details the procedures and equipment that you will need to survive a forced landing and the subsequent 24 hours. The preparation before a flight can easily make the difference between surviving or not surviving. This is one of the most important pieces of equipment in a pilot's pre-flight planning.

Available in three sizes.

Standard (6.5"x 9")P/N 13-00444**\$15.95**
 Compact (5"x 7")P/N 13-00446**\$13.95**
 Pocket (3.75"x 3.25")P/N 13-00447**\$8.95**

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 checklists for your aircraft are stacked and color tabs allow you to locate the checklist you need.

Part No.	Description (Checkbook Checklist for:)	Price ea.	Part No.	Description (Checkbook Checklist for:)	Price ea.
13-03091	Cessna150 D-K	\$16.95	13-01275	Cessna 182Q	\$9.95
13-01261	Cessna 150L	\$9.95	13-01276	Cessna 182R	\$9.95
13-01262	Cessna 150M	\$9.95	13-01277	Cessna 182S	\$9.95
13-01263	Cessna 152	\$9.95	13-01278	Cessna 182RG	\$9.95
13-01264	Cessna 172FGH	\$9.95	13-01279	Cherokee140	\$9.95
13-01268	Cessna 172R	\$9.95	13-01280	Cherokee160	\$9.95
13-01270	Cessna 172P	\$9.95	13-01281	Cherokee180	\$9.95
13-03102	Cessna 172RG	\$16.00	13-01282	Piper Warrior	\$9.95
13-01272	Cessna 182E-M	\$16.00	13-01283	Piper Warrior II	\$9.95
13-01273	Cessna 182N	\$9.95	13-01284	Piper Archer II	\$9.95
13-01288	Piper Seminole	\$13.95	13-01286	Piper Arrow II	\$9.95
13-01291	Piper Seneca I	\$13.95	13-01287	Piper Arrow III	\$9.95

QUICKMATE™ CHECKLISTS



CheckMate® Aviation Inc. announces a brand new single-card checklist in abbreviated format. QuickMate™ is designed specifically for the experienced or high-time pilot that prefers a checklist with only the most crucial information listed. This streamlined format will also appeal to pilots who typically have resisted using any checklist. QuickMate™ includes all V-speeds, both in KIAS and in MPH, and contain the exact same quality emergency information found in CheckMate®. Available for single engine aircraft listed above.

Part No.	Description (QuickMate™ Checklist for:)	Price ea.	Part No.	Description (QuickMate™ Checklist for:)	Price ea.
13-00708	Cessna 150	\$9.95	13-00722	Cessna182R	\$9.95
13-00709	Cessna 152	\$9.95	13-00723	Cessna182RG	\$10.95
13-00711	Cessna 172	\$9.95	13-00724	Tomahawk	\$9.95
13-00712	Cessna 172M	\$9.95	13-00725	Cherokee	\$9.95
13-00713	Cessna 172M	\$9.95	13-00726	Warrior II	\$9.95
13-00714	Cessna 172N	\$10.95	13-00727	Archer II	\$9.95
13-00715	Cessna 172P	\$10.95	13-00728	Arrow II	\$9.95
13-00716	Cessna 172P	\$10.95	13-00729	Arrow III	\$9.95
13-00717	Cessna 177	\$9.95	13-00730	Sundowner	\$9.95
13-00718	Cessna 177RG	\$9.95	13-00731	Bonanza S35	\$9.95
13-00719	Cessna 182	\$9.95	13-00732	Bonanza	\$9.95
13-00721	Cessna 182Q	\$16.00	13-00733	Mooney	\$9.95

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.

Standard (6.5"x9")P/N 13-02713**\$16.25**
 Compact (5"x7")P/N 13-02714**\$14.50**
 Pocket (6.75"x3.25") P/N 13-02716**\$9.75**

PS

PLOTTERS

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\$23.95



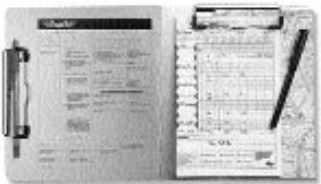
E6B PAPER FLIGHT COMPUTER - Made from solid, heavy-weight fiberboard, an economical version of the aluminum model described above including all its problem-solving features.
P/N 13-02298\$10.95



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\$23.95



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\$9.40



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, frequencies, 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\$24.95

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 \$32.60

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\$12.85



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\$12.95



ULTIMATE MICRO PLOTTER - 8" long. Convenient for flight bag, shirt pocket, or airplane storage. Made in USA. P/N 13-02303\$6.90



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. Made of durable Lexan® resin.
P/N 13-02306\$5.95



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\$6.90



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\$10.80



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 KneeboardsP/N 13-06925\$13.95
IFR Kneeboards.....P/N 13-06930\$14.85



ASA PILOT SUPPLIES

APPROACH PLATE 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.

NACOP/N 13-01066**\$10.65**
7-RingP/N 13-02316**\$10.95**

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**\$11.95**

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.

NACOP/N 13-01065**\$17.95**
7-RingP/N 13-02322**\$17.70**

SHEET PROTECTORS



Made of durable, translucent plastic to protect the most frequently used approach plates. Sold in packs of 10.

NACOP/N 13-02317**\$4.85**
7-RingP/N 13-02318**\$4.90**

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-RingP/N 13-02323**\$4.85**

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 13-02324**\$8.95**

Book-style Chart Wallet - 6 double-sided pockets holds up to 12 maps between the covers.
P/N 13-02325**\$12.70**

Large Book-style Chart Wallet - Pockets hold up to 22 charts between the covers. Riveted spine.
P/N 13-00412**\$19.95**

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 sectionals, 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**\$12.95**

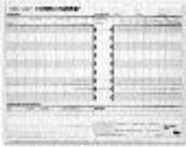
QUICK CHECK CARDS



A great reference tool for student pilots, pilots who fly more than one aircraft, or pilots flying at a new airport. Convenient shirt-pocket size provides quick 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**\$4.25**

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**\$3.75**

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 & durable, 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 PrivateP/N 13-01548**\$1.95**
SFR CommercialP/N 13-01549**\$1.95**
SFR InstrumentP/N 13-01551**\$2.20**
SFR HelicopterP/N 13-01547**\$2.15**

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 CertificateP/N 13-02326**\$9.75**
Private Pilot CertificateP/N 13-02328**\$9.75**
Private Ground School Certif.P/N 13-02327**\$9.75**
Aviation Achievement Certif.P/N 13-02330**\$9.75**
Helicopter Solo Flight Certif.P/N 13-02329**\$9.750**

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**\$11.95**

LANDING PATTERN COMPUTER

Easily helps determine appropriate headings for each leg when landing or departing the airport - great teaching aid!

P/N 13-06935**\$12.95**

HEADSET BAGS / FLIGHT BAGS



Flight Attache' - Holds all the materials a student pilot needs. 15" long x 11" deep.

P/N 13-02335**\$12.30**

Flight Bag - 23.5" long x 7.5" deep x 7.5" wide with expandable pockets.

P/N 13-02336**\$62.50**



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**\$19.75**

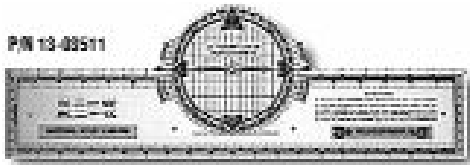
Double Headset Bag - Double-sided, 1/4" padding everywhere; can hold two headsets.

P/N 13-02334**\$31.85**



PS

PLOTTERS



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.

Description	Parts No.	Price
8" Plotter NP-7 Standard for WAC and Sectional Charts	13-19908	\$3.95
13" Plotter NP-13 Standard for WAC and Sectional Charts	13-19913	\$4.85
13" Plotter WSNP-13 WAC and Sectional Charts (Lexan) Lifetime Guarantee	13-03509	\$6.60
13" Plotter NPR-13 Rotatable Azimuth WAC and Sectional Charts	13-03511	\$7.50
13" Plotter WSNPR-13 Lifetime Guarantee Rotatable Azimuth WAC and Sectional Charts (Lexan)	13-03512	\$7.95
Universal IFR Plotter RFC-1 Jepp/NOS Holding Pattern	13-03513	\$6.30
Universal IFR Plotter UIP-V (Same as Jeppesen PV-5) Jepp/NOS Charts Holding Pattern Entry (Vinyl)	13-03514	\$4.95
13" Plotter FAA-170 Military WAC and Sectional Charts International Navigation Plotters Plotter/Protractor CPP-5 Douglas	13-03516	\$9.20
International Combination Plotter/Protractor	13-03506	\$4.20
13" ICAO Plotter IP-13 Fixed Azimuth, Nautical/Kilometer Scales	13-03507	\$7.95
13" ICAO Plotter IPR-13 Rotatable Azimuth, Nautical/Kilometer Scales	13-03508	\$10.90

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, pencil holder and sharpener. This top-of-the-line unit features a battery-operated, adjustable intensity non-glare light (batteries not included). Anodized aluminum. Meets all military specs.

MXU-163/C..... P/N 13-06900.....**\$69.95**

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, pencil holder and sharpener. This is the unlighted version of MXU-163/C. Anodized aluminum. Meets all military specs.

MK-2A/C.....P/N 13-03521.....**\$28.95**

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.....**\$20.80**

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.....**\$9.85**

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.

0-150.....P/N 13-03519.....**\$9.85**

PILOT FLIGHT FOLIO



The Pilot Flight Folio is a high quality vinyl folio packed with useful information for preflight planning and cross country flying. The folio is designed for pilots of all skill levels. Plane & Pilot magazine calls it a decoder ring for your lap. The front panel provides useful in-flight information for VFR & IFR flight including: PIREP sequence, time conversion, light gun signals, radio facility chart, radio frequency chart, chart scale, cruise altitudes, IFR check-

lists, Flight Watch frequency & more. The back contains information pertinent to flight planning including: WX brief number, flight plan form, METAR/TAF weather decoder, airspace & VFR minimums, Transponder codes, ATIS sequence, VOR service volumes and more. Opening the folio and folding it back on itself, it becomes a handy lap board. With a large spring clip at the top center (left side when opened and positioned as a lap board) it snugly holds a chart or even a NOS approach plate book in place. In this position flipping up the folio reveals the in-flight information correctly positioned in an easy to read type face.

P/N 13-22881.....**\$12.95**

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 Instructions** - 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.

E6-B2U - Deluxe, top-of-the-line quality, 5" x 9-5/8", all aluminum construction. Includes: • "Universal conversions: feet to meters, pounds to kilograms, liters to US gallons, US gallons to IMP. gallons or fuel weight or oil weight. • Patented micro-set (aligns scales to perfect accuracy). • Flush dials to eliminate parallax; answers are read with absolute accuracy. • Scales with contrasting colors for easy computation. • "Universal" conversions color-coded for quick and easy use. • Heavy gage anodized aluminum for added rigidity and non-glare surface. • 2-color fully illustrated instruction manual plus supplement on Dead Reckoning, Wind Effect Theory and Calculations P/N 13-03492.....**\$23.85**

E6-B9U - Same as E6-B2U, but without micro-set and printed in black only P/N 13-03497.....**\$22.50**

E6-B3 - Pocket-size plastic; anodized aluminum high/low speed wind slide P/N 13-03493.....**\$19.50**

E6-B4 - Pocket-size deluxe, all anodized aluminum; high/low wind slide. P/N E6-B4.....**\$19.95**

E6-B8 - Budget student computer, plastic body, plasticized wind slide. P/N 13-03495.....**\$8.30**

E6-B8P - Budget student computer, plastic body, plasticized wind slide; includes an 8" Navigation Plotter. P/N 13-03496.....**\$8.95**

E6-B9U - Universal Large Aluminum P/N 13-03497.....**\$22.50**

E6-B UHS - High Speed Slide (for use with E6-B2 or E6 B9U) P/N 13-03498.....**\$8.30**

PS

FLIGHT COMPUTERS - LOG SHEETS - PLACARDS

Aero Products Research CR Computers



CR computers are very popular with pleasure and professional pilots. They solve T/8/D and wind triangle problems for 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 **\$21.60**
- CR-4** - 4-1/4" dia. (same as Jepp CR-2); vinyl. Standard model used by the military.
P/N 13-03501 **\$21.10**
- CR-6** - 6" dia. Used by navigators for maximum readability (Same as Jepp CR-3); vinyl.
P/N 13-03502 **\$22.50**

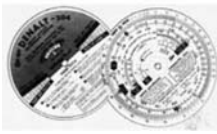
Aero Products Research Flight Desk



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.

APR PILOTS FLIGHT DESK P/N 13-03517..... **\$22.50**

Aero Products Research Time/Speed/Distance Computer



Time/Speed/Distance computers. "How-to-use" instructions printed right on the unit. Text printed in straight, easy-to-read lines; desired scales and windows located at a glance. Perfectly calibrated 2-color dials eliminate parallax errors. Fully illustrated instruction manual with each model.

APR-303 3-3/4" dia. T/S/D computer with traffic pattern orientator; anodized alum. P/N 13-01133..... **\$9.95**

Aero Products Research T/S/D Computer Keychain

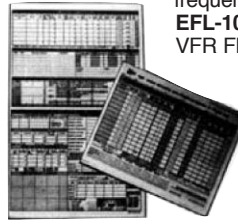


1-1/2" dia. Identical to the real thing, this traditional usable Time/Speed/Distance keychain has a beautiful compass star with calibrated scales on reverse side.

P/N 13-03721..... **\$12.95**

Aero Products Research CR Computers

Simplify VFR or IFR navigation with these handy logs which provide for listing of intersections, radials, frequencies, clearances and complete flight plan.



EFL-100 Pad of 5-1/2" x 8-1/2" sheets;
VFR Flight Logs

P/N 13-03526..... **\$3.25**

EFL-200 Pad of 5-1/2" x 8-1/2" sheets;
IFR Flight Logs

P/N 13-03527 **\$3.25**

EFL-100 Pad of 11 " x 8-1/2" sheets;
organized detailed pre-planning and navigation on cross-country flights.

Includes pre-flight checklists and sample instruction sheet

P/N 13-03528..... **\$4.20**

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. 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.



APR INST PANEL PLACARD SET P/N 13-03522..... **\$10.35**

APR VFR FLT DESK INFO PLACARDS P/N 13-03523..... **\$6.60**

APR IFR FLT DESK INFO PLACARDS P/N 13-03525..... **\$6.60**

The ATIS Wheel



Pilots and air crew 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 4"x7" rectangular durable format with seven individual 1.5" wheels positioned about 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 area's ATIS 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 broadcast Atis information data.

P/N 13-03919..... **\$29.95**

The Wind Wheel

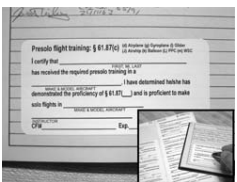


The wind wheel is an intuitive device used to present a site picture of aircraft position in relation to runway alignment and relative wind. Very useful to determine crosswind direction and speed and for situational awareness on the ground and in the air. The accident rate associated with flying decreases as flight time and experience increase, however the process of gaining experience is sometimes a dangerous trial and error exercise. One of the areas of flight experience that consistently leads to high accident rates is "wind related" incidents that often involve improper or unexpected crosswinds in takeoff and landing. The wind wheel is a handy tool that helps student pilots and seasoned aviators interpret wind direction and cross wind components for takeoff and landing.

P/N 13-03721..... **\$12.95**

PS

Sport Pilot Pre-Printed Logbook Endorsements



The Instructors Endorsement Pack contains 13 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.#, etc.

P/N 13-03721..... **\$12.95**

DESCRIPTION	PARTS #	PRICE
INSTRUCTOR ENDORSMENT PK ENPAK	09-01310	\$19.95
PRE-SOLO AERONATICAL KNL 6187B	09-01311	\$1.95
PRE-SOLO FLIGHT TRAINING 6187C	09-01312	\$1.95
PRE-SOLO TRNG & 90 DAY RENL	09-01313	\$1.95
SOLO AT ANOTHER AIRPORT 6193B	09-01314	\$1.95
1ST SOLO X-C 61.93(C)(1) 6193C	09-01315	\$1.95
SOLO X-C 61.93 (C)(2) 6193C2	09-01316	\$1.95
REPEATED SOLO X-C <=50NM6193B2	09-01317	\$1.95
SOLO IN CLASS B,C & D 6194A	09-01318	\$1.95
SOLO TO/FROM CLASS B,C OR D	09-01319	\$1.95
TAKING KNOWLEDGE TEST 6135A	09-01320	\$1.95
PROFICIENCY CHECK 61321	09-01321	\$1.95
PASSING FLIGHT TEST 61309	09-01322	\$1.95
TAKING SPORT PILOT PRACT 61313	09-01323	\$1.95

AIRCRAFT SPRUCE WEST
CORONA, CA • (877) 4-SPRUCE

612
Prices Subject to Change Without Notice

AIRCRAFT SPRUCE EAST
PEACHTREE CITY, GA • (877) 477-7823

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 technologies. Aviators can calculate true airspeed, ground speed, mach number, fuel, fuel headings and courses, time/speed/distance, winds, headwind/crosswind components, gliding info and weight & balance.

P/N 13-01040.....\$64.50

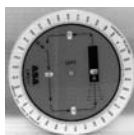
HOLDING PATTERN COMPUTER



This useful tool shows a pilot what entry is appropriate given the as signed holding radial. It is also a very useful teaching aid.

P/N 13-06940 \$11.95

LANDING PATTERN COMPUTER



Easily helps determine appropriate headings for each leg when landing or departing the airport. It is a great teaching aid.

P/N 13-06935 \$12.95

JEPPESEN 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 case and instruction manual.

CR-3 (6" diam.) P/N 8434\$26.55

CR-5 (3-3/4" diam.)

P/N 13-21714...\$25.60

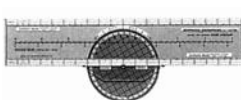
PN-1 NAVIGATION PLOTTER



Allows easy identification of WAC and Sectional chart scales. Calibrated in statute & nautical miles.(Size: 12.25" x 4")

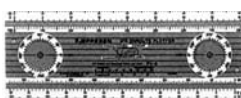
P/N 13-21724\$10.92

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.....\$12.82

PV-5 IFR ENROUTE PLOTTER



Folding Navigational Plotter(Size: 3-3/16 x 8-1/2 inches) Pocket sized, fold 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"x5-3/16"

EnglishP/N 13-21722\$11.87

SpanishP/N 13-02412\$11.87

JEPPESEN

HOLDING PATTERN COMPUTER



Use this for both pattern entry and outbound heading information, for either standard or nonstandard holding patterns. Measures 3-1/2" x 4-3/4".

P/N 13-21716 \$12.82

RUNWAY CROSSWINDS COMPONENT COMPUTER



The Runway Crosswinds Component Computer simplifies and clarifies landing and take-off decisions. Its design allows a visual understanding of the wind effect on the body of the aircraft. A great teaching tool for use in ground schools and can be ordered in a larger size (10"x10") classroom demonstration model. The Runway Crosswinds Component Computer has been designed in both an 'ultralight model' with it's lower wind speeds of 3, 6, 9, and 12 knots, as well as the general aviation model with wind speeds of 5, 10, 15, and 20 knots.

For General Aviation Aircraft ..P/N 13-00844..... \$6.19

For Ultralight AircraftP/N 13-00845..... \$6.19

THE "MISSING ROSE"



The "Missing Rose" is a 2.75" by .030" clear plastic compass rose overlay template with center hole. Very handy for finding direct course headings from any spot on an aeronautical or wall chart. Greatly simplifies navigation by providing you a 360° compass rose at any location on your charts or graphics. Great companion to the Rapid-Course parallel course plotter for use in congested areas.

P/N 13-21775 \$3.60

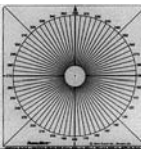
PILOT'S WIND VISUALIZER



The Wind Visualizer takes the guesswork out of crosswind takeoffs and landings. Simply put the Wind 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. Durable non-warping 3.75" diameter plastic. Includes full instructions.

P/N 13-19520..... \$13.95

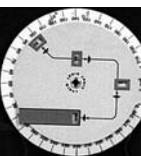
RADIALMATE COMPASS ROSE



RadialMate™, a 3.5" clear 20 mil plastic 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 13-08799 \$3.25

PDQ COMPUTER



The PDQ Computer is a quick visual presentation of the traffic pattern at your airport of arrival. Easy to 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 8313 \$9.95

JEPPESEN STUDENT CSG



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.

PlasticP/N 3866\$12.82

MetalP/N 3867\$28.45

PS

PLOTTERS - COMPUTERS

RAPID COURSE PARALLEL COURSE PLOTTER



The "Rapid Course" precision parallel plotter is called the "Poor Man's GPS". It allows you to find magnetic courses in under 5 seconds without having to locate chart lat./long./course line intersections or figure magnetic variation! It can cut pre-flight planning in half and is easily used in the cockpit. It is the only course plotter usable on both VFR & IFR charts and is excellent for VFR or IFR flight. Contains both Nautical and Statute mile scales and is expandable for drawing or measuring longlines without that ruler you never have. Only 9.125" by 1.5" closed size to easily fit in any flight bag. Made of unbreakable Lexan material.
P/N 13-21785 **\$13.90**

PLOT-RITE ALL METAL NAVIGATION PLOTTER



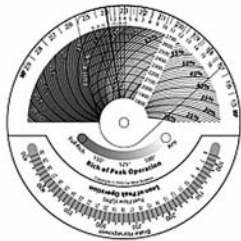
The new Plot-Rite is an all metal navigational plotter for use with VFR sectional, terminal and WAC charts. The front has both sectional and terminal area scales and the rear has WAC and sectional scales. The top edge has the familiar 180° compass rose and the open center enables you to find longitude 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 **\$21.50**

THE AIRMILER TAPE MEASURE FOR CHARTS



An essential tool for every flight planning kit. A durable metal tape measure for measuring mileages 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 8036 **\$19.95**

APS POWER WHEEL HORSEPOWER COMPUTER



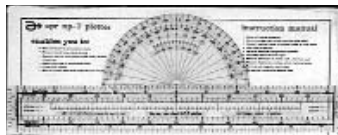
The Power Wheel is the only device that we know of which can calculate your aircraft engine's power based on so many important factors. Using the RPM, manifold pressure, altitude and outside air temp, the pilot can use the Power wheel to calculate horsepower (as a % of max rated hp) very quickly and easily.

While power computers of the past have done little more than take information from the POH and make it available in a different form, the Power wheel does much more. 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 another way. Knowing how much power is being produced allows the pilot to operate the engine in a way that will reduce the stresses it sees, offering longer life and reduced operating expenses. Once the pilot uses the Power Wheel to find their % hp, they can take the next step to find the mixture setting that will be best for their engine. Built on the Red Box concept (and as seen in AOPA Pilot, Feb 2004, p 120) the mixture settings suggested by the computer will keep the engine's internal combustion pressures low, out of the Red Box region of operation.

- PMC-NA-2625P/N 13-03131**\$34.95**
- PMC-NA-2700P/N 13-03132**\$34.95**
- PMC-NA-2600P/N 13-04213**\$34.95**
- PMC-NA-2600cP/N 13-04214**\$34.95**
- PMC-NA-2600P/N 13-04215**\$34.95**

Visit www.aircraftspruce.com to specify aircraft and engine make & model and we will provide correct APS Computer.

PLOTTERS AND SLIDE COMPUTERS



These are specially-designed for easy use. The APR plotter has parallel statute and nautical scales, with 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 PlotterP/N 13-19908**\$3.95**
13" APR PlotterP/N 13-19913**\$4.85**
E6-B4 AluminumP/N E6-B4**\$19.95**

E6-B HIGH SPEED SLIDE - 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**\$9.40**
E6-B Flight ComputerP/N 13-00813**\$23.95**

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 right- and left-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**\$18.95**

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. Totally transparent. Includes instructional text.
P/N 13-30215 **\$2.95**

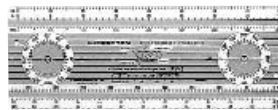
PILOT'S "TIME MACHINE" - Convert the 12 hour clock to the twenty-four hour clock and to Universal Coordinated Time (UTC). Time zone chart is included. Fuel duration calculation can be determined with this new instrument. Use it to file accurate flight plans and to give position reports.
P/N 13-30225**\$12.85**

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**\$9.95**



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**\$9.95**



JEPPESSEN PV-5 IFR ENROUTE PLOTTER

Size 3-3/16" x 8-1/2"
P/N 13-21718.....**\$9.50**

PS

FLIGHT ACCESSORIES - PLOTTERS

ON COURSE AVIATION PRODUCTS

CHART MARKS



Customize your charts with these highly visible, self sticking, removable accents, outlines, & notes. Add a compass rose to any airport or airway intersection, outline VOR information, accent airport or communication information. 20x20nm see through notes accept pencil or pen for your special information. All are easily removable after your flight.

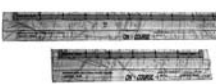
- Note (11/package)P/N 13-30110**\$3.50/ea.**
- Compass Rose (11/package)P/N 13-30111**\$3.50/ea.**
- Outlines (17/package)P/N 13-30112**\$3.50/ea.**
- Accents (16/package).....P/N 13-30113**\$3.50/ea.**

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**\$3.85/ea.**

MAGNIFYING SCALE



At last, an accurate nautical mile scale with a built in magnifying lens to clearly enlarge the fine print on sectional charts. Made of heavy duty, extra strong, cast acrylic, printed in two colors with easy to read sectional scale graduations (1:500,000). Available in 2 sizes, 100 NM (16") for flight planning, 60 NM (10") for cockpit use. Order both.

- 60 NMP/N 13-30120**\$14.95**
- 100 NMP/N 13-30121**\$14.95**

VFR NAVIGATION LOG SHEETS

Record all of your flight information in a single convenient log: Flight plan, airport frequencies, navigation checkpoints, weight and balance and some helpful checklists. Great for flight school use to assure uniform student training standards. P/N 13-03363.....**\$12.50**

UNBREAKABLE SUPER PLOTTER



Here's a special flight planning tool we really like. A colorful little plotter with a rotating azimuth that makes it much easier 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! Reads distance in statute miles or nautical miles for both sectional and WAC charts. Made of bullet proof Lexan. Won't crack, break, or warp in extreme heat or cold. P/N 8644 **\$18.95**

FLIGHT FORMS

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



VFR CROSS COUNTRY 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 com frequencies & airport diagrams. P/N 13-30115**\$3.85**



EN-ROUTE NAV-LOG – For the more advanced VFR pilot, a nine leg En-Route NAV-log provides ample space for navigation data, time (estimated & actual) plus communication and destination sections. (25/pad) P/N 13-30119**\$3.50**



WX-BRIEF FORMS –WX-BRIEF forms take the mystery out of talking to briefers or controllers. Logical arrangement in correct briefier and controller 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.(25/pad) P/N 13-30116**\$3.85**



IN-BOUND or OUT-BOUND COMM-AIDS – Inbound or out-bound 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-BoundP/N 13-30117**\$3.50**
Out-Bound.....P/N 13-30118**\$3.50**

JEPPESEN

HOLDING PATTERN COMPUTER

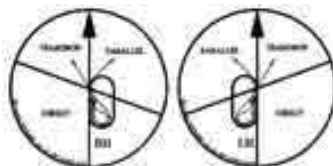


Use this for both pattern entry and outbound heading information, for either standard or non-standard holding patterns. Measures 3-1/2" x 4-3/4".

P/N 13-21716 **\$12.82**

HOLDING PATTERN AID

How would you like to increase the chances of passing your instrument rating? Did you know that the number one area that instrument applicants fail their check ride is Holding Patterns? It is not the hold itself, but the ENTRY procedure! Help yourself pass your test with this simple to use static clink 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 easily peels off when you need it. One package includes four HPA's, two left hand holding patterns and two right hand holding patterns. Developed by a Certified Instrument Flight Instructor with the intent to decrease the failure rate of instrument students and increase the level of safety that pilots are entrusted with. Get some First Aid for your holding patterns, get the Holding Pattern Aid. Measures 3" in diameter. White lines and text on a clear background. P/N 13-04166.....**\$8.96**



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 typical chart with out "stepping off" (a typical Sectional Chart measures 375 n.m., corner to corner). • Establishes an accurate straight line 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. Flite-Tape is a quality product and comes in a vinyl storage pouch. P/N 13-01038.....**\$7.95 ea**

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. •The magnetic variation formula is printed directly on a Flite-Trac to give you confidence in calculating a magnetic heading. Flite-Trac avoids the necessity to slip 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.....**\$7.30 ea**

PS

KNEEBOARDS

VFR/IFR NAVBOARD & CHARTSAVER



Hold charts between two clear plexiglass surfaces for in-flight 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 **\$17.50**

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.

P/N 13-12655 **\$36.70**

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 **\$52.00**

TRIFOLD KNEEBOARD



The **STANDARD** features include: right and left light pockets that double as pen/pencil pockets, 1.5" wide adjustable plastic strap, 4 clear plastic information pocket, right & left document loops, side release buckle, durable wire clip, and padded backing.

P/N 13-12660 **\$37.30**

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 13-12661 **\$53.00**

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" 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.

P/N 13-12650 **\$36.60**

The **PERFORMANCE PACKAGE** includes: information cards, clear document protectors, removable document protectors, & releasable cable ties (holds document protectors securely to kneeboard). P/N 13-12651 **\$52.00**

MINI TRIFOLD KNEEBOARD

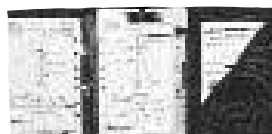


This mini trifold kneeboard measures 8" x 16.5". The standard features include: reversible clip board which allows pocket and document loops to be reversed right or left side, 1-1/2" wide adjustable plastic strap, clear plastic information pocket, removable document loops, 4 elastic pen/pencil slots, side release buckle, durable wire clip, and NEG-G strap.

P/N 13-12665 **\$31.60**

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 **\$47.30**

JEPPESEN 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 the clip board. Includes free U.S. Low altitude planning chart. Size: 10"x 20" open.

Kneeboard/Clipboard P/N 13-06956 **\$42.70**
IFR Clipboard only with leg strap P/N 13-06956-1 **\$18.95**

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 **\$37.95**
IFR Clipboard only with leg strap P/N 13-06955-1 **\$18.95**

AUTEL QUICK-CLAMP YOKE BOARDS

Fly Heads Up!

by organizing all your nav aids up on your yoke with an Autel Quick-Clamp multi-use yoke mounting chart board system

- Simultaneously holds approach plate or NOS book and enroute chart, stopwatch, pencil and calculator within easy reach and view in scan pattern
- Fast to install or remove - clamps onto yoke shaft without tools
- Continuously adjustable viewing angle
- Sturdy & light aluminum - no structural plastic

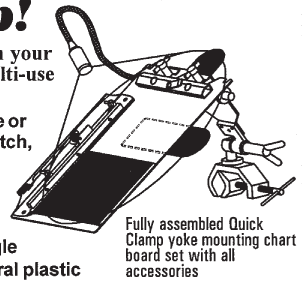


CHART BOARDS & ACCESSORIES

- N Board \$16.00 (QC-NB)
- SW Bracket (QC-SWB)
- SW Holder (QC-SWH)
- A Plate \$9.40 (QC-A1) (for calculators etc.)
- S Board \$13.60 (QC-SB)

SUPPORT ARMS

- Short Support Arm \$9.30 (QC-SS)
- Long Support Arm \$14.95 (QC-LS)
- Flexlite & Bracket \$37.20 (QC-FLX)

Choosing a Yoke Board Set:

A set consists of a base an arm and a board. The 2 base fits all singles except Bonanzas, Commanches, and big Beechcraft. The 3 base fits all but Bonanzas and Barons with center shafts. The short support arm is more firm and so best except for closed yokes. The N board is more versatile than the S board.

MOUNTING BASES

- \$24.30 (QC-2BM)
 - \$30.50 (QC-3BM)
 - \$44.20 (QC-BBM)
- Quick-Clamp 2 3/4" to 1-3/8" dia
Quick-Clamp 3 3/4" to 2" dia
Bonanza/Baron

Product codes of Quick Clamp sets are "QC" plus the first letter of the name of each element. For example, a "QC-3SN" set means a yoke mounting chart board made up of a 3 base, a Short Support Arm, and an N Board.

The Most Popular Sets are:

code	base	arm	board	price
QC-2SN	2	S	N	\$38.20
QC-BSN	B	S	N	\$58.25

LIGHTED MILITARY KNEEBOARD™



MXU-163/C (5.75"x 10" x 2.5") deluxe kneeboards are 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, pencil holder and sharpener. This top-of-the-line unit features a battery-operated, adjustable intensity non-glare light (batteries not included), anodized aluminum. Meets all military specs. P/N 13-06900 **\$69.95**

PS

KNEEBOARDS

FLIGHT DESK TRI-FOLD KNEEBOARD



Our 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 used for a computer, it can be used to hold a handheld transceiver. Made of durable black cordura. Size: 19.25"x9.5" unfolded. Clipboard size: 6" x 9.5".

P/N 8718 **\$14.95**



NAV-DATA KNEEBOARD

The most well-organized knee board you'll ever own. It's like having a flight desk strapped to your leg. Made of heavy gauge aluminum and rugged, light-weight phenolic plastic. Comes complete with clearance pad, frequency forms, checklist forms, blank flight plans, and a pen.

Soft padded saddle fits snugly & comfortably on your leg with strong nylon strap & velcro strip. Notebook-style, folds closed to 10"x 8".

P/N 8943 **\$69.25**

ORGA-KNEE-ZER™ KNEEBOARDS



ORGA-KNEE-ZER™ Kneeboards are extremely versatile, organizer/kneeboards providing a standard 7-ring binder on a very stable platform with built-in pencil sharpener, combo maglite/pencil holder and many other unique features. Compact stowage, rugged materials and powder coat finish, add even more to their rich feature set. Use for

VFR or IFR flight, using

NOS or Jepp charts and see how their versatility can adapt to your demanding and varied needs as pilot. The patented design of Model A1-MC allows you to flip through your charts, checklists or other reference materials, with unobstructed access to the writing surface for jotting ATC instructions or holding flight plans. It's excellent for most general aviation aircraft and is very popular with Cessna and Piper pilots. It's 9" long x 8" wide and up to 16" wide when fully open. It can also be used as a simple clipboard for preflight checks when closed (includes 3 chart pockets).



P/N 13-03326 **\$79.95**

Starlite Notes Premium Windshield Mounted Note and Map Holder

Included with Starlite Notes: Premium Stainless Steel Retractable Ball Point Pen and 3x5 Notepad "Daily User Guideline" decal included with all Starlite Notes products for safe use recommendations. Excellent for use in aircraft, auto, truck, RV, marine, bus, or taxi applications. Can be used as a GPS remote antenna holder. For a secure and tidy arrangement, temporarily "CLIP" and "AIM" to the sky. Can also be used for light weight items such as stop watch, compass, flight equipment, etc by use of velcro or double stick tape. The Yoke Mount System for Starlite Notes consists of RAM-B-121B & RAM-B-201. These two components can be used on the Optional Model Notepad base, after the simple removal of the suction cup components for future re-use. The Yoke mount system will not work on the Standard Model, as this unit does not have the RAM ball mount attached to the notepad base.



Standard Model P/N 13-04163 **\$69.95**

Optional Model P/N 13-04164 **\$89.95**

Optional Writing Surface Plate P/N 13-04165 **\$33.95**

SINGLE PANEL FL-100 KNEEBOARD

The Aeroboard FL100 has a large pocket behind the clipboard to keep these items handy. The detachable clipboard can be removed and placed inside the pocket creating a platform for a GPS. 7.5" x 11". 1 large chart pocket behind the clipboard. Detachable 6"x9" aluminum clipboard. 1-1/2" wide nylon/elastic leg strap with Velcro® fastener.

FL100 Black 13-03703 **\$19.95**

FL100 Navy 13-03704 **\$19.95**

BI-FOLD FL-200 KNEEBOARD

Aeroboard FL200 has many outstanding features which makes it one of the most useful organizational tools a pilot can have. The FL200 has a bifold design with 3-ring center binder, available in both Right & 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: • Bifold design available in both right- & left-hand models • 3-ring binder (includes (10) 8-1/2" x 5-1/2" clear page protectors) • 2 large 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 SureCheck FlightPad™ included • Cover made of durable Cordura®

FL200R (RIGHT) Black..... 13-03698..... **\$34.95**

FL200L (LEFT) Black..... 13-03701..... **\$34.95**

FL200R (RIGHT) Navy..... 13-03699..... **\$34.95**

FL200L (LEFT) NAVY..... 13-03702..... **\$34.95**

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 additional pockets 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 leg strap with Velcro® fastener • 2 elastic pen/pencil holders • SureCheck FlightPad™ included • Cover made of durable Cordura® FL300 BLACK 13-03696

FL300 NAVY 13-03697 **\$39.95**

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 pilot's 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 clamp • Perfect size for approach plates and airport diagrams • Easy fit in flight bags due to low profile hardware • Yoke tube clip fits 3/4 to 1-1/8" tubes (other sizes available) • Guaranteed against breakage for the life of the product* Lighted Version: • LED light illuminates entire surface for ease of reading at night • Flex neck on light easily stores out of the way for day use. • LED lasts 100,000 hours / included batteries last 100 hours.

Standard P/N 13-04216..... **\$24.95**

Lighted P/N 13-04217..... **\$36.40**

KNEEBOARDS - HOODS

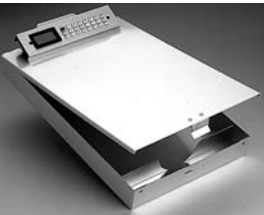


PILOTS LAP DESK

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"

P/N 13-00808\$29.30

FLY INFORMED KNEEBOARD/CALCULATOR



This bottom opening pilot clipboard measures 8-1/2" x 12" and features a bottom storage compartment (1-1.25" 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.

Clipboard/CalculatorP/N 13-00809\$35.50
 Detachable Light (clear).....P/N 13-00811\$19.95
 Detachable Light (red)P/N 13-00812\$19.95



ZULUBOARD

Ergonomically designed kneeboard allowing the pilot to angle the clipboard into a more natural writing position. Well thought out pocket arrangements, highly stable knee strap, durable and stylish fabrics, and quality construction make this the best kneeboard on the market. **Key Features:** Exterior chart pocket will fit several charts, e6b, plotter and more • Knee strap • Large vertical side pen pockets • Zippered mesh inside pocket • 3-in-one flight pad • 4 standard VFR Zulucards • Available in durable ballistic nylon or Australian waxed canvas

Ballistic Nylon, GreenP/N 13-02393\$26.95
 Ballistic Nylon, BlackP/N 13-03224\$26.95
 Ballistic Nylon, NavyP/N 13-03225\$26.95
 Ballistic Nylon, OrangeP/N 13-03226\$26.95
 Waxed Canvas, BrownP/N 13-02394\$29.95
 Waxed Canvas, BlackP/N 13-03228\$29.95
 Waxed Canvas, YellowP/N 13-03229\$29.95
 Waxed Canvas, Lt. BlueP/N 13-03230\$29.95

3-IN-ONE ZULUPAD



No need to have separate weather briefing, flight plan and en route information pads. Keep it all in one place where it is accessible.

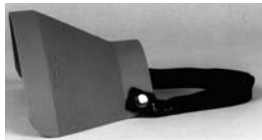
Key Features: Keeps EX briefing, flight plan and flight data all on one clear, logical sheet. High quality 20-lb. Yellow bond paper for reduced glare with constructed purple printing. Logical format follows standard VFR and IFR from towered airports.
 P/N 13-02395\$2.95

Ask about ZuluCards. Quick, easy access to information.

ZULUWORKS KNEE CUP



If you've ever taken part in a demonstration of spatial disorientation you'll know how dramatic even simple head movements can be on your perception. Even the ordinary act of looking down for a dropped pencil can cause your inner ear to send dangerously incorrect signals to your brain. Thus the Knee Cup. This simple pencil and flashlight holder straps just below your knee and keeps important item in easy reach. No need to move your head to look for that pencil. There's another one right there. Black only.
 P/N 13-03461\$14.95



JIFFYHOOD

A lightweight plastic hood that does the job inexpensively, Jiffyhood stows rolled up in a flight case, or even in your pocket. Has an adjustable elastic headband for comfortable fit. P/N 3300\$10.95



FRANCIS IFR HOOD

The Francis hood restricts your vision totally to your instruments and because it's so small, it won't block any part of an instructor's vision. It's made of lightweight but shock-resistant plastic, and has a cushioned face pad for comfort, Adjustable elastic headband.

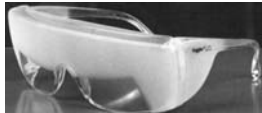
P/N 3362\$22.85



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 headsets and the universal adjusting strap reduces pressure on the ears and temple. The Velcro™ strap fits comfortably and flip-up lens allows convenient IFR/VFR flight transition. The high quality polycarbonate lens is impact resistant.

P/N 13-404311\$26.55



FOGGLES

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 headsets and microphone with no interference or discomfort. They come with a protective carrying case and weigh only two ounces.

P/N 13-06500\$18.25



SUPER HOOD

This Super Hood is one of the safest, most comfortable and best made instrument training hoods we've found anywhere. Ideal with eye glasses or headsets it slides in under the headset without relinquishing control of the aircraft and it can be instantly removed at any time for a safe approach or landing. Blocks outside reference but provides a full panel view to reduce vertigo. Light weight (3 oz.) and comfortable.

P/N 13-30200\$21.50



VIBAN IFR TRAINING HOOD

Pilots prefer ViBAN over other view-limiting devices because it weighs only 2 oz., making it easy to put on and take off during flight. Its eye-catching design is skillfully engineered to provide a perfect view of the instrument panel while providing complete occlusion forward and to the side. Even more, ViBAN folds compactly to fit in its own durable case and is easily stored in your flight bag. w/Nose without NosepieceP/N 13-02022\$28.95
 with Nosepiece.....P/N 13-02023\$28.95

HOODLAMB



Hoodlamb is ideal for comfortable IFR training. No tools required. Hoodlamb snaps on and off the headset quickly and easily. fits most headsets including David Clark, Flightcom, Avcom, Microcom, SkyCom, SkyPro, Pilot, Sigtronics, Softcomm, Telex and others.
 P/N 13-22799\$23.50

OVERCASTERS



Overcasters is a unique IFR training tool which clips to glasses (sunglasses or RX) in seconds. Flip-up in one easy motion for easy transition. Feather light with no straps, helmets, or hoods. Accepted by IFR examiners for checkriders.

P/N 13-33799\$19.50

PS

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. Size: 5.75"x7.75"; 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 (FAR 43.9), Inspection Record (FAR 43.11-91.217).

- AF-5 Hard CoverP/N 13-32385.....**\$9.95**
- AL-12P Soft CoverP/N AL-12P**\$5.90**

EAA AMATEUR BUILT AIRCRAFT LOGBOOK



Published by the Experimental Aircraft Association to meet the special needs of the custom-built aircraft owner. Includes spaces for listing aircraft specifications, inspection approvals and a 20 page pilot flight log.

P/N 13-16500.....**\$4.95**

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.....**\$15.95**

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 pgsP/N 13-32375.....**\$3.95**
- SA-2 Hard cover-Hunter Green; 7.75" x 5-5/8"; 96 pgs.P/N 13-32384.....**\$8.95**

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. Several lawyers that use the *Planeview Aircraft Flight Log* have said that it meets the requirements of the IRS for required information to be recorded for an aircraft being used for business. It can possibly save you money when you have to go to the maintenance shop because you already have up-to-date times and landings for the aircraft and components, reducing or eliminating the desk time that the mechanic has to put in just to get that information from your maintenance logs. A potential buyer of the aircraft could see how the aircraft has been flown and taken care of. Inside the rear cover is a FAA flight plan form. The owner could permanently fill in all the blanks of this form that do not change, such as AC identification, AC type, etc.

- Single engine logP/N 13-01946**\$7.95**
- Multi-engine logP/N 13-01947**\$7.95**

INTERNATIONAL PILOT LOGBOOK



In addition to complying with all the FAA regulations, the international logbooks follow all ICAO and JAA recordkeeping requirements pertaining to pilots. These are the two governing bodies regulating the aviation industry outside the US.

The *International Pilot Master Log* is perfect for professional aviators, or those who fly frequently. Hardcover: 11"x6.5", 278 pgs. Includes green summary pages. P/N 13-02554**\$19.95**
The *International Pilot Log* is a slightly smaller version of the Master Log. Hardcover: 7.75"x4", 68 pgs. P/N 13-02553**\$9.95**

AERO PRODUCTS ENGINE 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 CoverP/N 13-32390.....**\$9.65**
- EL-13P Soft CoverP/N EL-13P**\$6.95**

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

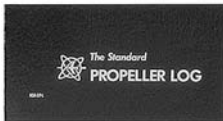
- Hard Cover (7.75" x 5-5/8") 96 pagesP/N 13-32382**\$8.95**
- Soft Cover (7.25" x 4"). 64 pagesP/N 13-32380**\$3.95**

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 airframe without digging through those usually kept in the maintenance hangar. P/N 13-03163.....**\$6.95**

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.....**\$3.95**

ASA AVIONICS LOG BOOK



Includes entries for avionics equipment, VOR accuracy, transponder & ELT checks, AD & SB compliance, maintenance records. Soft cover, blue/gray, 7.25"x4", 64 pgs. P/N 13-02315.....**\$4.35**

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, recurrence, 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.....**\$13.85**

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. 60 pages included, refill packs available. P/N 13-02308**\$31.95**

Flight Schedule Refill Pack - Can be used over and over with this 60-day refill. P/N 13-02309**\$15.95**

PILOT LOG BOOKS

JEPPESEN PROFESSIONAL LOGBOOK



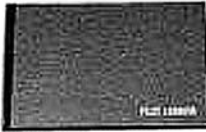
This professional log book from Jeppesen, measuring 6.5" x 11" is constructed of sturdy, easy-to-read ledger paper. Includes an elegant cover on which you can add your name in gold.
P/N 13-21728.....\$27.50

JEPPESEN PROFESSIONAL EUROPEAN LOGBOOK



Complies with JAR 1.080 regulations for logging flight time in Europe. handles 10 years of data. Size: 17.1 x 28.6 cm
P/N 13-02212\$24.65

JEPPESEN 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\$12.82

LEATHER LOGBOOKS



These deluxe logbooks are practical and easy to use. 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 to make each entry easy to fill out. Each logbook has memorandum pages, annual flight totals, flight summary pages, notes, endorsement pages, vinyl document savers, and vinyl picture savers. This logbook provides pilots a book that can contain all their important documents and records in one place. The Old World Leather Logbook features naturally embossed lettering, and is available in 2 colors, terra or brown. The Premier Leather Logbook features gold lettering, 24K gold plated rings & corner savers. Available in 2 colors, brown or burgundy. Size: 10" x 7".

- Old World Logbook (brown)P/N 13-21955\$83.25
- Old World Logbook (terra).....P/N 13-21960\$75.00
- Premier Logbook (brown)P/N 13-21755\$104.95
- Premier Logbook (burgundy).....P/N 13-21855\$98.95

CLASSIC BLUE AERLOG



The Classic Aerlog is designed for pilots who like to keep their pay records next to their flying time and expenses. This is especially important to pilots and other crew members who are paid by the hour or by each leg flown. The Classic Aerlog is permanently sewn-bound so transcribing to another master log is not necessary. This flight crew log provides trip and expense record, matches pay to flying time, has a built-in 3 yr. calendar, and meets FAA and IRS requirements. P/N 13-20155.....\$6.95

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 have a semi-concealed black wire binding. It also has a water resistant vinyl cover and it only comes in one color. The Little Aerlog has the same proportional spacing and the convenient look and feel as the Classic Aerlog. Therefore, it will be an easy transition from the Little Aerlog to the Classic whenever the need for the pay section arises.
P/N 13-02199\$6.95

LIGHTER LOG



Keep accurate, up-to-date logbooks all the time with no effort. The LighterLog flight recording logbook plugs into your aircraft's lighter receptacle and tracks each flight effortlessly. In addition, the LighterLog monitors the system voltage and warns of possible generator or electrical problems. Just 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. At any time 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 Lighter Logbook 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 Lighter Logbook software will list all airports within cruising range of the recorded flight time. Just point and click on the destination airport. The included Lighter Logbook software will store hundreds of logs and thousands of flights on even the smallest of computers. Logbooks are stored in an industry standard format allowing your flight information to be used in every spreadsheet, database, word processing, and logbook program available. Print familiar style logbooks from the computer whenever you like, removing the drudgery of insurance, check-ride currency and tax-time reports. Automate record keeping for flight schools, flying clubs and partnership.
P/N 13-02199.....\$6.95

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.

They 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. Most 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. The first change you will notice is the removal of many of the columns that were useful only for specific flight (i.e. instructor, cross country, float). The Single Engine, Multi Engine, and Instrument columns are all still there, however, the last 5 columns are now blank. They allow the pilot to log what is important to them. Each page is 8.5"x 9"; 20 entries per page; 288 pages which allows for 2600 entries. Logbook also has pages for logging aircraft flown, type ratings, recency and proficiency requirements as well as having 10-yr summary section.

- Aviation - Brown leather.....P/N 13-02139.....\$79.95
- Antique - Brown leatherP/N 13-02141\$79.95
- Black leatherP/N 13-02140\$79.95

STANDARD PILOT MASTER LOG BLACK



Hard cover, 6.5"x 11", 278 pages.
P/N 13-32392\$18.95

STANDARD PILOT LOG BLACK



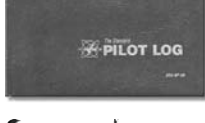
Hard cover, 7.5" x 4", 68 pages..
P/N 13-32365\$7.85

STANDARD PILOT LOG BURGUNDY



Hard cover, 7.5" x 4", 206 pages.
P/N 13-32360\$9.80

STANDARD PILOT LOG NAVY BLUE



Hard cover, 5.5" x 8.5", 110 pages.
P/N 13-32355\$8.95

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 pgs.
P/N 13-02032\$5.80

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 13-02032\$5.80

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"; hold logbooks up to 6.5"x11".
P/N 13-02311\$18.80

GLEIM PILOT LOGBOOK



The Gleim Pilot Logbook provides detailed entries for all inflight 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\$6.95

PS

FLIGHT BAGS



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.

- 8"-BlackP/N 13-02510\$312.95
- 8"-Brown.....P/N 13-02511\$312.95
- 7"-BlackP/N 13-02512\$312.95
- 7"-Brown.....P/N 13-02513\$312.95



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 pockets. size: 18"l x 8"w x 12"h

- 8"-BlackP/N 13-02514\$292.95
- 8"-Brown.....P/N 13-02515\$292.95
- 7"-BlackP/N 13-02516\$292.95
- 7"-Brown.....P/N 13-02517\$292.95



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"Lx10"W x 16"H

- BlackP/N 13-02522\$475.00
- BrownP/N 13-02526\$395.00



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

- 8"-BlackP/N 13-02518\$267.95
- 8"-Brown.....P/N 13-02519\$267.95
- 7"-BlackP/N 13-02520\$267.95
- 7"-Brown.....P/N 13-02521\$267.95



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\$185.00



CERTIFICATE HOLDER

Handmade from the same Grade A saddle leather as Scott's flight bags. Guaranteed to last a lifetime.

- BlackP/N 13-02530\$26.90
- Brown.....P/N 13-02531\$26.90



LAPTOP COMPUTER SLEEVE

Made of the same Grade A saddle leather with a padded liner and Velcro closure on top with a front pocket for papers. Will fit in the Jumbo or the Square Top Bag. Included accessory case measures 11L X2.5W X2H. It stands in a vertical position at the end of the bag next to the laptop. Holds the power cords, modem line, etc.

P/N 13-02527\$125.00



OUTSIDE POCKET

Optional 6"x9" end pocket w/ snap closure can be added to either or both ends of any kit bag. Designed to hold enroute charts, etc.

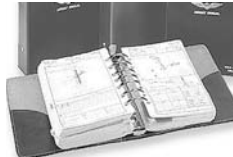
- BlackP/N 13-02524\$53.25
- Brown.....P/N 13-02525\$53.25



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.

P/N 13-02529\$43.00



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 Quick Tabs, see below.

- 1" ring-Black....13-02533..\$58.75
- 2" ring-Black ..13-02535..\$58.75
- 1" ring-Brown..13-02534..\$58.75
- 2" ring-Brown..13-02536..\$58.75



INSIDE POUCH

Optional 5" X 12" zippered pouch attaches with velcro to top inside flap. Large enough for sunglasses, 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\$38.60



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\$6.60

PS



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.

- BlackP/N 13-02537\$58.75
- Brown.....P/N 13-02538\$58.75

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.



P/N.....13-03279\$74.95

DISCOVERY DUFFLE BAG

The Discovery flight duffel is a fully padded duffel 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.



P/N.....13-03280.....\$89.95

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.



BlueP/N 13-03277.....\$34.95
 GreenP/N 13-03350.....\$34.95
 RedP/N 13-03351.....\$34.95
 YellowP/N 13-03352.....\$34.95

VOYAGER FLIGHT ATTACHE

The Voyager Attaché flight bag gives you the ability and convenience of being able to carry charts, sectionals 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/or Air Charts. A kneeboard pocket is on the back for added convenience. The Voyager is made of ballistic nylon for extra durability.



Blue.....P/N 13-03278.....\$54.95
 Red.....P/N 13-03348.....\$54.95
 Yellow.....P/N 13-03349.....\$54.95

EXPLORER 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.



P/N 13-03276.....\$10.50

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 genuine DuPont® Cordura® 1000 Deniers, water resistant, fully padded with a 1/4" foam and backed with a layer of tricot. Features separate zippered compartment along with an extra side pocket.

Red...P/N 13-00281...\$24.95 Navy Blue ..P/N 13-00282...\$24.95
 Grey..P/N 13-00286...\$24.95 Black..P/N 13-00288.....\$24.95

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 headset pouches 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.

Size: 11"H x 10.5"W x 12"L.
 Navy Blue.....P/N 13-00291.....\$45.95 Grey...P/N 13-00294.....\$45.95
 Black.....P/N 13-00297....\$45.95

NORAL PRIVATE PILOT BAG



Fits all the goodies and gadgets a pilot needs and wants to carry. It has two extra large zippered headset pouches 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. Size: 11"H x 10.5"W x 15.5"L.

Navy BlueP/N 13-00299\$58.95
 Black.....P/N 13-00313\$58.95

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"LX11"WX10 1/2"H
 Black...P/N 13-04088...\$78.95 Navy Blue..P/N 13-04091...\$71.95
 Grey...P/N 13-04092...\$83.25 Red.....P/N 13-04093...\$71.95

NORAL ADVANCED PILOT BAG



The Advanced Pilot Bag has extra large access (5-3/4" wide) and is very comfortable! 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 light weight 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 to protect from theft. Size: 11"H x 10.5"W x 18.5"L

Red.....13-00164.....\$88.95
 Grey.....13-00169.....\$88.95
 Black.....13-00172.....\$88.95

NORAL AIRCRAFT DOCUMENT HOLDER



This document holder is made of a strong cotton fabric and features two clear viepockets. Comes in two versions: Clip-On and Velcro.
 Clip-On...P/N 13-01129.....\$14.85
 Velcro.....P/N 13-01134.....\$13.90

PS

JEPPESEN/ASA 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\$39.90

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")**
Brown8301\$198.55
Black13-01198\$198.55
- FC-104 Holds 4 Binders (12"x8"x18")**
Black13-00116\$208.05

AIRCLASSICS FLIGHT BAGS

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.



ASA FLIGHT BAG

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



P/N 13-02336\$63.00

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.

PILOT BAG.....P/N 13-04057\$36.50
TRIP FLIGHT BAG.....P/N 13-

SINGLE HEADSET BAG



For those who like to fly with minimum baggage, this holds one headset, has extra pockets, and allaround padding.

P/N 13-02333\$19.75

FLIGHT ATTACHE



Holds all the materials a student pilot needs. 15" long x 11" deep/

P/N 13-02335\$12.30

FLIGHT ATTACHE



Holds all the materials a student pilot needs. 15" long x 11" deep/

P/N 13-02335\$12.30

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")

BlackP/N 13-621214\$113.95
BlueP/N 13-00994\$113.95

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. 15"x 6.5" x 12" (black only)

P/N 13-00998\$75.95

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"
BlackP/N 13-00995\$94.95
BlueP/N 13-00996\$94.95

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"x17" (black only)

P/N 13-00997\$32.95

THE PROSPECTOR HEADSET BAGS



Fully padded 600 denier poly for extra protection. Snap-on handle grip for comfort. Large enough to fit the ANR headsets. Single and dual configuration. 12"x 2.75"x 8" (black only)
Single Hdst Bag ..P/N 13-00999.....\$17.95
Duel Hdst Bag.....P/N 13-01004.....\$34.85

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\$24.95

PS

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 non-porous surface.....P/N 8197\$5.85



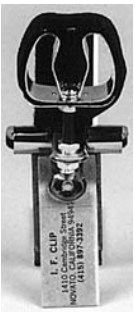
WATCH-IT ACCESSORY HOLDER

"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\$9.65



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 \$9.95



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 \$17.95
- 1.5" Post Wide Clamp.....P/N 8487\$17.95
- 2" Post Standard ClampP/N 8690\$17.95
- 2" Post Wide ClampP/N 8822\$17.95
- 3" Post Standard ClampP/N 8674\$17.95
- 3" Post Wide ClampP/N 8915\$17.95



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 13-01759\$4.95



GENUINE LEATHER FLIGHT BAG

This 17" wide soft pliable black lamb skin flight bag is perfect for charts, plotters, headsets, kneeboards, etc. Features heavy duty construction, multiple pockets, and riveted handle mounts. P/N 13-03368.....\$4.95



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 13-01757\$22.50



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\$19.95

12 POCKET TRAYTOTE BAG - This bag has 2 pockets inside and 10 pockets outside with a 11"x 6" 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 ..\$32.95



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\$39.95

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: Small: 6" x 6" x 12" Bag.....P/N 13-02500\$18.95 Large: 6" x 6" x 18" BagP/N 13-02600\$12.00



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\$26.60 Large Tool Wrap.....P/N 13-01747\$38.95



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\$8.95



AIRCRAFT DOCUMENT CASE

This durable, flexible black 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.....\$18.50



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.....\$6.90 7-1/2" X 8".....P/N 13-17904.....\$12.67 5" X 7"P/N 13-17905.....\$2.77 5" X 14" Double PocketP/N 13-17906.....\$4.78



NELSON PRODUCTS

NELSON GENERAL AVIATION 10 UNIT, 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 #1P/N 13-02944.....**\$36.50**
 First Aid Kit #2P/N 13-02945.....**\$69.50**


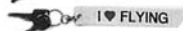

CONVENIENCE BAG

Disposable urine & vomit bag. • Wide mouth. • No spill, cleanup, or odors. • One-hand use
 P/N 13-02821.....**\$2.95**



KEY CHAINS

Choice of:

 "Remove Before Flight" ..P/N 13-02836....**\$3.95**
 "I ♥ Flying"P/N 13-02949....**\$3.95**
 "I'd Rather Be Flying"P/N 13-02950....**\$3.95**



PEN/PENCIL CLIPS

• Installs on clipboard, under instrument panel or on post • Holds pen/pencil tight • Available in single, double or triple holders • Made in England.
 Single.....P/N 13-02762....**\$4.60**
 DoubleP/N 13-02763....**\$5.60**
 TripleP/N 13-02764....**\$7.30**



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

GrayP/N 13-02823.....**\$11.95**
 MirrorP/N 13-02824.....**\$11.95**
 Amber.....P/N 13-02825.....**\$11.95**
 Clear.....P/N 13-02826.....**\$11.95**



NELSON AILER-LOCKS

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

Ailer-Lock standard (4.25")
 P/N 13-02829**\$14.95**
 Ailer-Lock Large (10")
 P/N 13-22705**\$21.50**



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.....**\$12.75**



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**\$19.95**
 RedP/N 13-02928**\$19.95**
 WhiteP/N 13-02929**\$19.95**










APPROACH PLATE HOLDER


- 10 leaf
- Flip-over (not accordion)
- Size: 6"x 9"
- Vinyl

P/N 13-02772.....**\$5.95**

"REMOVE BEFORE FLIGHT" PITOT COVERS

 Universal cover....P/N 13-02816.....**\$6.95**
 Piper blade cover P/N 13-02946.....**\$6.95**
 3/4 pitot cover.....P/N 13-02947.....**\$8.95**
 5/8 pitot cover.....P/N 13-02948.....**\$8.95**
 Fuel vent cover....P/N 13-02817.....**\$11.50**
 Sm RBF streamerP/N 13-02818.....**\$4.00**
 Lrg RBF streamerP/N 13-02819.....**\$6.50**

ELECTRONIC 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.....**\$33.40**



EMERGENCY STROBE

• Waterproof • USCG approved • Operates up to 60 hours • Uses D battery • Red lens available

StrobeP/N 13-02811**\$28.50**
 Tri-podP/N 13-03002.....**\$7.50**
 Replace. moduleP/N 13-02813.....**\$8.95**



STROBE / FLASHLIGHT

• 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 13-02809.....**\$29.95**

NELSON PRODUCTS



AS568A O-RING KIT

- 70 Duro Nitrile
- 382 O rings
- Great kit for the homebuilder
- Sizes: -06 to -32

P/N 13-02804\$39.50



AN900 GASKET KIT

- 144 Copper crush washers
- MS 35769 cross ref.
- Sizes: -3 to -30

P/N 05-02220\$96.50



PARKER O-RING KIT

- 382 AS568A O-rings
- Nitrile/Buna N-70 Duro
- Temp range: -65° to 275°F
- For Petroleum oils and fluids
- Sizes: -01 to -30

P/N 05-02210\$69.75



INSTRUMENT BUGS

- 2 per package • Thumb screw friction lock • Day or night use • Uses IFR Appr. set Bug on "VSI" • RPM, ALT, V speeds, etc. • Suction cup sticks right on instrument face

P/N 10-00114\$9.85



OILVALVE THE SPILL STOPPER

- Takes the mess out of adding oil
- On/off control
- No more spills
- Re-usable

P/N 13-02833\$1.95



NELSON SUPER SIPHON

- Don't swallow harmful liquids
- Transfers liquids up to 3.5 gallons/min.
- Shake pump to start siphoning
- Display carton of 12 units

P/N 13-02785\$7.80



E6-B FLIGHT COMPUTERS

- High speed wind correction
- Standard & micro size
- feet per mile vs. feet per minute
- Crosswind Table
- Conversions

StandardP/N 13-00813\$23.95

MiniP/N 13-02299\$23.95



VFR/IFR NAVBOARD

- 2 sizes: 10"x 12" and 10.5"x 15" • Charts stay fresh and readable • Non-metallic • Thin line design • Use grease pencil & wipe clean

10.5"x 15"P/N 13-02767\$24.75



PORTAWEATHER WEATHER RADIO

- Warns of dangerous weather conditions continuously • Guards NOAA 162.40, 162.475, & 162.55 MHz frequency • Crystal controlled for clear reception • Powered by (2) AAA batteries (not included)

P/N 13-02759\$9.95



WORLD BAND RECEIVER

- Alarm clock
- 2 band AM/FM radio
- Analog clock w/light
- Requires (4) C batteries for radio
- Requires (1) AA battery for clock
- DC jack

P/N 13-02806\$177.65



NELSON FLIGHT CLOCK

- Stopwatch / Alarm • Quartz clock • Digital • Replaceable battery • Yoke clip holds Sectionals, Approach plates, etc. • 2 yoke sizes, Piper & Cessna • 12 or 24 hour time

CessnaP/N 13-31210\$13.25

PiperP/N 13-31200\$12.35



AIRFIELD WALL CLOCK

- Beautiful wood grain cabinet
- Analog clock w/thermometer & hydrometer
- Hour, minute & sweep second hand
- Uses AA battery

P/N 13-05756\$12.35

"THE BOOSTER" NELSON FLIGHT SEAT



Sit higher, and sit softer on 2" or 3" of high-density Volara foam (similar to NASA TemperFoam) covered with durable, "breathable" Cordura. Made of USAF specifications, with segmented backrest. Really makes a difference on a long flight. Also available: 3" or 4" thick child's cushion that finally lets kids see outside, keeps them interested as well as comfortable during long trips. Both seat and cushion available in either Air Force blue, red or gray. Add -B (blue), -R (red), or -G (gray) after part no. to indicate color. Back: Width - 16" Height - 17" Back: Width - 16" Height - 17"

Description	Part No.	Price
Blue 2" Booster seat w/ 1-1/2" back	13-02916	\$64.95
Red 2" Booster seat w/ 1-1/2" back	13-02917	\$64.95
Blue 3" Booster seat w/ 1-1/2" back	13-02918	\$63.95
Red 3" Booster seat w/ 1-1/2" back	13-02919	\$70.95
Blue 3" Booster seat w/ 3" back	13-02920	\$85.95
Red 3" Booster seat w/ 3" back	13-02922	\$85.95
Child's Blue 3" Booster cushion	13-02923	\$46.95
Child's Red 3" Booster cushion	13-02924	\$46.95
Child's Blue 4" Booster cushion	13-02925	\$49.95
Child's Red 4" Booster cushion	13-31861	\$49.95
Blue - 4" Seat x 3" back	13-31845	\$85.95
Red - 4" Seat x 3" back	13-31850	\$85.95
Blue - 4" Seat x 1-1/2" back	13-31855	\$85.95
Red - 4" x 1-1/2" back	13-31860	\$85.95
Gray - 3" Seat x 3" back	13-02921	\$85.95
Gray - 2" Seat x 4" back	13-02862	\$85.95
Red - 2" Seat x 4" back	13-02863	\$85.95
Red - 3" Seat x 4" back	13-02864	\$85.95
Green - 4" Seat x 1-1/2" back	13-02866	\$83.95
Blue - 4" Seat x 1" back	13-02867	\$85.95
Green - 2" Seat x 1-1/2" back	13-02868	\$85.95
Green - 3" Seat x 1" back	13-02869	\$59.95
Blue - 3" Seat x 1" back	13-02870	\$59.95
Green - 3" Seat	13-02871	\$46.95

PS

NELSON PRODUCTS



18" BALLISTIC NYLON FLIGHT BAG

- 1000 Denier Nylon
- Pocket for pens, charts, holds Jeppesen manuals, etc.
- Holds hand-held radio • End pocket
- Interior compartments • Color: Black

Flight bag w/ tow handle & wheelsP/N 13-02798.....**\$135.00**



SIMULATED LEATHER FLIGHT BAG

- Inside and outside compartments.
- Combination locks.
- Size: 18 X 8"x 13.5". Looks like leather.

P/N 13-02799.....**\$29.75**



AVIATOR'S NYLON HELMET BAG

U.S. Military issue.
Size: 19"x 20". Color: Sage green

P/N 13-02800.....**\$65.50**



NELSON HEADSET BAG

- Holds 2 headsets with ease • Size: 7"x 7"x 9"
- Made of 1000D, DuPont Cordura w/padded interior & removable partition
- Available in red, blue & gray to match other Nelson Products

BlueP/N 13-02745.....**\$25.00**
Red.....P/N 13-03001.....**\$25.00**



AVIATION LUGGAGE

- **MEDIUM SIZE:** Heavy duty Nylon with front & end pockets for headsets. 2 front zip pockets and 1 snap pocket. Black or dark green.
- **STANDARD SIZE:** Heavy duty Nylon with front & end pockets for headsets, top loading & 3 zipper front pockets and 1 snap pocket. Black or dark green.

Medium size - Black.....P/N 13-02743.....**\$42.50**
Medium size - Dark greenP/N 13-02926.....**\$42.50**
Standard size - Black.....P/N 13-02744.....**\$36.00**
Standard size - Dark greenP/N 13-02927.....**\$36.00**



MILITARY TOOL BAG

- 22 oz. canvas • Brass zipper • Hard fiber bottom w/ inside socket storage • 2 accessory compartments • Size: 11"x 7"x 6" • Available in black and olive

BlackP/N 13-02450.....**\$22.95**
Olive.....P/N 13-02500.....**\$18.95**

NELSON KNEEBOARDS



MILITARY: TRI-FOLD: • Size: 19.5"x11.5" (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, blue, red, gray.

BlackP/N 13-02885.....**\$10.90**
Red.....P/N 13-02739.....**\$15.85**
Replacement Flight LogsP/N 13-02888.....**\$4.00**

STANDARD: • Folds to 3/4" • Holds sm E6-B, stopwatch, & pencils • Supplied with pad of 50 flight logs • Aluminum board holds approach plates • Available in black, blue, red, gray, and olive drab.

Blue P/N 13-06905.....**\$18.40**
Gray P/N 13-06910.....**\$18.40**
Red P/N 13-02884.....**\$18.40**
Olive P/N 13-02903.....**\$18.40**



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.....**\$24.95**
BlueP/N 13-03005.....**\$24.95**
GrayP/N 13-31872.....**\$24.95**
Olive drab.....P/N 13-03006.....**\$24.95**
Red.....P/N 13-31870.....**\$24.95**

NELSON MASTER PILOT LOG CASE



- Pockets for glasses, computer, flashlight, and pencils
- Holds largest (ASA) pilot log.
- Available in black, blue, gray & red.

GrayP/N 13-02930.....**\$17.50**
Red.....P/N 13-02931.....**\$17.50**



NELSON AIRCRAFT DOCUMENT CASE

- Made of Cordura
- Two compartments
- Available in blue, gray, olive drab, orange & red.

Olive drab.....P/N 13-03012.....**\$17.50**
Orange P/N 13-03013**\$17.50** BlueP/N 13-02932.....**\$17.50**
Gray.....P/N 13-02933**\$17.50** RedP/N 13-02934.....**\$17.50**



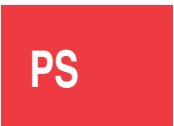
LOGBOOKS

Choice of:
Aircraft LogP/N 13-02747.....**\$4.95**
Engine LogP/N 13-02748.....**\$4.95**
Avionics LogP/N 13-02749.....**\$4.35**
Propeller Log.....P/N 13-02255.....**\$4.95**



PILOT LOGBOOK/JOURNAL

- Logbook & journal combined • Space for ground instruction entries • Valuable tool for students & rated pilots • Rugged twin-loop steel coil binding • Large remarks & endorsements sections. P/N 13-02765.....**\$24.95**



SEAT FOAM - FLIGHT SEATS

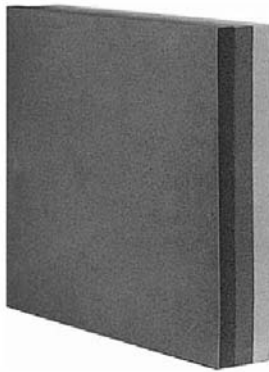
BACKSAVER FOAM



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 unobstructed blood circulation, significantly reducing discomfort, even over long periods. In addition, Backsaver foam has excellent energy absorption properties, which have made it excellent for use in 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.

BACKSAVER FOAM 16" X 18" 01-09325.....\$68.95
 BACKSAVER 36" X 80" FOAM 01-09330.....\$465.00

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 certificated aircraft but is excellent for homebuilts. Some special sizes in 1", 2" or 3" thicknesses are available on special request.

1" x 16" x 18"P/N 01-09310\$17.50 ea.
 2" x 16" x 18"P/N 01-09320\$37.77 ea.
 3" x 16" x 18"P/N 01-09300\$71.00 ea.

INFLATABLE LUMBAR SUPPORT



This inflatable air pillow can be installed just under the seat material and will give you the customized support just where you need it. A convenient palmsize pump and a release valve control the firmness of the lumbar support. The In-Flight Back Support is made of a heavy duty self-extinguishing neoprene rubber, specially designed to pass FAR 23.853 flame-test requirements.

One inflatable lumbar supportP/N 13-01501\$49.95
 Two Inflatable lumbar supportsP/N 13-01821\$81.95

INOPERATIVE INSTRUMENT AID



Designed with static cling polyester, the IIA will stick to your glass instrument face without licking and will stay there until you want to remove it. Practicing instrument failures during flight is a requirement by the Federal Aviation Administration for your practical test. One package includes four Inoperative Instrument Aids. Developed by a Certified Instrument Flight Instructor with the intent to improve instrument instruction. measures 3" in diameter.
 P/N 13-04173\$8.95

"THE BOOSTER" NELSON FLIGHT SEAT



Sit higher, and sit softer on 2" or 3" of high-density Volara foam (similar to NASA TemperFoam) covered with durable, "breathable" Cordura. Made of USAF specifications, with segmented backrest. Really makes a difference on a long flight. Also available: 3" or 4" thick child's cushion that finally lets kids see outside, keeps them interested as well as comfortable during long trips. Both seat and cushion available in either Air Force blue, red or gray. Add -B (blue), -R (red), or -G (gray) after part no. to indicate color. Back: Width - 16" Height - 17"
 Back: Width - 16" Height - 17"

Description	Part No.	Price
Blue 2" Booster seat w/ 1-1/2" back	13-02916	\$64.95
Red 2" Booster seat w/ 1-1/2" back	13-02917	\$64.95
Blue 3" Booster seat w/ 1-1/2" back	13-02918	\$63.95
Red 3" Booster seat w/ 1-1/2" back	13-02919	\$70.95
Blue 3" Booster seat w/ 3" back	13-02920	\$85.95
Red 3" Booster seat w/ 3" back	13-02922	\$85.95
Child's Blue 3" Booster cushion	13-02923	\$46.95
Child's Red 3" Booster cushion	13-02924	\$46.95
Child's Blue 4" Booster cushion	13-02925	\$49.95
Child's Red 4" Booster cushion	13-31861	\$49.95
Blue - 4" Seat x 3" back	13-31845	\$85.95
Red - 4" Seat x 3" back	13-31850	\$85.95
Blue - 4" Seat x 1-1/2" back	13-31855	\$85.95
Red - 4" x 1-1/2" back	13-31860	\$85.95
Gray - 3" Seat x 3" back	13-02921	\$85.95
Gray - 2" Seat x 4" back	13-02862	\$85.95
Red - 2" Seat x 4" back	13-02863	\$85.95
Red - 3" Seat x 4" back	13-02864	\$85.95
Green - 4" Seat x 1-1/2" back	13-02866	\$83.95
Blue - 4" Seat x 1" back	13-02867	\$85.95
Green - 2" Seat x 1-1/2" back	13-02868	\$85.95
Green - 3" Seat x 1" back	13-02869	\$59.95
Blue - 3" Seat x 1" back	13-02870	\$59.95
Green - 3" Seat	13-02871	\$46.95

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 Cutlas /210 and other larger seats.

Label 'B' fits Cessnas 150/152, Piper, Archer, Warrior, Cherokee, and similar seats.

Available only in Black, Navy Blue, & Smoke Grey.

Color	Part No.	Price	Color	Part No.	Price
2" Seat Cushion - Type B			2" Seat Cushion - Type A		
Black	13-00323	\$53.75	Black	13-00327	\$62.50
Blue	13-00324	\$47.95	Blue	13-00328	\$62.50
Grey	13-00326	\$51.95	Grey	13-00329	\$58.95
3" Seat Cushion - Type B			3" Seat Cushion - Type A		
Black	13-00331	\$65.75	Black	13-00334	\$66.95
Blue	13-00332	\$64.50	Blue	13-00336	\$64.50
Grey	13-00333	\$65.75	Grey	13-00337	\$67.50
4" Seat Cushion - Type B			4" Seat Cushion - Type A		
Black	13-00338	\$79.75	Black	13-00342	\$76.25
Blue	13-00339	\$74.50	Blue	13-00343	\$76.25
Grey	13-00341	\$79.75	Grey	13-00344	\$79.50
Color	Part No.	Price	Color	Part No.	Price
2" Seat Cushion only			3" Seat Cushion only		
Black	13-00346	\$33.60	Black	13-00221	\$39.90
Blue	13-00347	\$33.60	Blue	13-00222	\$39.90
Grey	13-00348	\$33.60	Grey	13-00223	\$39.90
4" Seat Cushion only					
Black	13-00224	\$38.95			
Blue	13-00226	\$42.90			
Grey	13-00227	\$42.90			

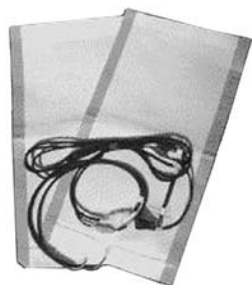
PS

SEAT COVERS - APPAREL

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 measure seats. P/N 13-01005 ..\$359.00 /pr.



WARMSEATS SEATS HEATERS

This do-it-yourself seat heater kit features dual zone heating (back and seat) with a built-in thermostat and high/low settings. Made by an OEM auto supplier, the kit uses carbon fiber (not wire) to provide quick and even flow heat. Universal fit and easy installation. Instructions included. Not FAA approved. P/N 13-02702\$14.95 ea

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). FAA Approved.

Available for the following planes: Beechcraft: Baron B-55, E-55, B-58, Bonanza V-35 (A or B), A-33, A-36, F-33A, A36TC. Cessna: 150, 152, 172, 177, 180, 182, 185, 210, 310, 340, 402, 414, 421. Aero Commander: 500, 600, 900, Piper: Archer, Cherokee, Warrior Tomahawk.

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\$375.00

COLORS

- Beige
- Black
- Burgundy
- Chocolate Brown
- Cream
- Honey Tan
- Ivory
- Metallic Blue
- Midnight Grey
- Natural
- Navy
- Oyster
- Plum
- Red
- Silver
- White

SPRUCE POLO SHIRT and WINDBREAKER



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. These hearty mesh double pique polos feature a tipped color collar & banded sleeves. Available in 2 colors: White with medium blue/navy blue collar and sleeve band accents or Deep Chamber Heather (light blue) with navy/white collar and sleeve band accents.

These polos feature the Aircraft Spruce logo on the left chest. Machine washable. 100% cotton. Sizes: S/M/L/XL.\$29.95

Color	Size	Part No.	Color	Size	Part No.
White	Med.	13-01985	Light Blue	XL	13-01980
White	Large	13-01982	Light Blue	XXL	13-01977
White	XL	13-01979	Navy Blue	Med.	13-01984
White	XXL	13-01976	Navy Blue	Large	13-01981
Light Blue	Med.	13-01986	Navy Blue	XL	13-01978
Light Blue	Large	13-01983	Navy Blue	XXL	13-01975

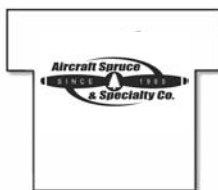
AIRCRAFT SPRUCE WINDBREAKER - These high quality, golf style pullover windbreakers are perfect for those chilly days on the course or at the airport. Color: Navy blue w/khaki trim and "Aircraft Spruce & Specialty Co" on left chest.

Medium ..P/N 13-01987\$44.95 LargeP/N 13-01988 ..\$44.95
X-Large ..P/N 13-01989\$44.95 2XLP/N 13-01990 ..\$44.95



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 headset. 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 \$14.95ea.



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.:

White
Small P/N 13-02810
Med...P/N 13-02910
Large P/N 13-03010
XLP/N 13-03110
XXL ..P/N 13-03120

Navy
Small P/N 13-02047
Med...P/N 13-02048
Large P/N 13-03049
XLP/N 13-03050
XXL ..P/N 13-03051

\$7.95 ea.



AIRCRAFT SPRUCE HOODED SWEATSHIRT

High Quality, Navy Blue, Pre-Shrunk Design shown not to scale

Size	Part No.
Small	13-03416
Medium	13-03417
Large	13-03418
XL	13-03419
XXL	13-03420

\$29.95 ea.



SUN VISORS - PITOT TUBE COVERS

ROSEN SUN VISOR SYSTEM



Fig. A

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 co-pilot 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.

BEECH - Bonanza/Baron, standard	P/N 7568	\$294.95
Bonanza/Baron,3rd Axis option	P/N 7311	\$362.95
Duke	P/N 7738	\$357.95
1900D.....	P/N 13-01926.....	\$672.00
King Air.....	P/N 13-01927.....	\$573.00
MOONEY - 1968 and later models original visors mounted on right or left side (not on center post)	P/N 7762	\$373.95
Comanche, All models,standard.....	P/N 7809	\$338.95
Comanche, Third Axis option	P/N 7924	\$392.95
Cherokee, Center mount	P/N 13-01315.....	\$321.95
Cherokee, swivel stud	P/N 13-01316.....	\$320.95
Seneca	P/N 13-01317.....	\$319.95
CESSNA		
170s-207s (except 177s) & older 210s w/original visors like fig.A: All 150s&152s (center mnt) Brackets are above pilots head.	P/N 7629	\$259.95
170s-207s (except 177s) w/original visors like Fig.C P/N 7006	P/N 7006	\$223.95
Cessna 180 3rd axis (1980 & earlier)	P/N 13-03173.....	\$310.95
Cessna 180 3rd axis (1981 & later)	P/N 13-03174.....	\$372.95
208 (side mount) Brackets are above doors	P/N 13-01309.....	\$422.95
210's w/o air cond. (Older 210's, see above)	P/N 7152	\$339.95
P210's and 210's w/air conditioning	P/N 7426	\$335.95
177's	P/N 7582	\$362.95
T303	P/N 13-01928.....	\$458.95
310s & 340s, special order to replace units with ball-joint cover style visor only (shown)	P/N 7687	\$391.95
337	P/N 13-01308.....	\$427.95
320	P/N 13-01311.....	\$423.95
400	P/N 13-01312.....	\$423.95
GRUMMAN - Cheetah	P/N 13-01313.....	\$398.95
MAULE	P/N 13-02471.....	\$345.95
OTHERS*		
Cirrus	P/N 13-03258.....	\$317.95
Lancair IV	P/N 13-01934.....	\$413.95
TBM 700	P/N 13-01935.....	\$638.00
Pilatus P12	P/N 13-01936.....	\$620.00
Homebuilders Universal surface mount	P/N 13-03175.....	\$178.75
Homebuilders Universal tube mount	P/N 13-03176.....	\$178.75

ROSEN 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 stand).
P/N 13-04014.....**\$74.25**

TINTED VISORS FOR CESSNA, BEECH, & PIPER

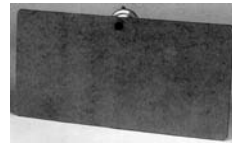
These tinted visors shade the sun and enable easier scan for traffic. They replace the stock visor and install in minutes using easy to follow instructions. Visors actually enhance visibility. Made in USA. Sold in sets of 2. FAA approved.

Visors for Cessna 150/152, 177, 210, 337
P/N 13-14250**\$148.75**
Visors for Cessna 172/182,180,185,205, 206
P/N 13-14255**\$148.75**

Visors for Beechcraft E33,E33A,E33C,F33,F33A,F33C, G33, H35, J35, K35,M35,N35,S35,V35,V35A,V35B,36,A36,A36TC,B36TC,95-A55,95-B55,95-B55A,95-B55B, 95-C55, 95-C55A, D55, D55A, E55, E55A, 56TC, A56TC, 58, 58A Pre-1978 (early model)P/N 13-00542**\$216.95**

Visors for Piper PA-28-140, PA-28-150, PA-28-160, PA-28-180, PA-28R180, PA-28-235 1964-1971P/N 13-00541**\$166.95**

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"x12" 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.

DIM-IT Moveable VisorP/N 7172**\$7.80**
Adapter (for porous surfaces)P/N 7113.....**\$4.65**

MINI DIM-IT



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

P/N 13-01758**\$6.95**

ADJUSTAVISOR



The Adjustavisor, 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**\$87.95**
Clip-on (smoke)P/N 13-03263**\$87.95**
Suction (yellow)P/N 13-03262**\$77.95**
Suction (smoke)P/N 13-03261**\$77.95**

PITOT TUBE COVERS



Spruce's own pitot 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. pitot tubes.

P/N 15210.....**\$6.95**

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. pitot tubes. Great looks & great protection!
P/N 15220**\$6.95**



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.....**\$8.95**

Piper Pitot Cover - This pitot cover is designed to fit the blade style pitot commonly found on piper aircraft. Small vent hole prevents pressurizing system
P/N 5740.....**\$12.50**



REMOVE BEFORE FLIGHT RIBBON:

This 3"x24" bright orange streamer with black letters features a grommet for a C ring to attach to anywhere on the aircraft. High visibility, fire resistant material. P/N15200..**\$5.95**

DO NOT TOW STREAMER: 17"

Streamer, attach with Velcro, Color international orange. P/N 13-02004.....**\$12.85**

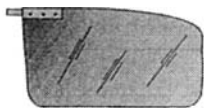
ASA PITOT TUBE COVERS

These 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; the 2"x 17" banner is bright red with white screen printing for a maximum visibility. Pitot Tube Cover 5/8" (small)

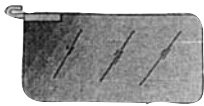
P/N 13-02378**\$8.95**

(Fits: Cessna 300/400 series, Citation & Conquest, Beech singles & twins, Piper Navajo & Cheyenne, Mooneys, Mitsubishi, Lear Jets & Cirrus) Pitot Tube Cover 3/4" (large)P/N 13-00854**\$9.35**
(Fits: Cessna 150,152,172,177,182, 200 series, Skymaster & the Falcon Jet)

PS



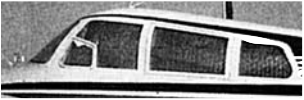
150/152, 177, 210, 337



172/182, 180, 185, 205, 206

SUN SHIELDS - CANOPY COVERS

KENNON SUPER SUN SHIELDS



The most durable sun shield on the market has a clear polyester coating to protect the plexiglass windows. Heat can permanently damage the interior and avionics in your aircraft. The secret is a material with two surfaces of aluminum separated by trapped air. This combination reflects 97% of radiant heat, an insulation value of R-9 equivalent to two inches of fiberglass. Kennon 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.....\$152.95



KENNON COWL PLUGS

Kennon cowl plugs are constructed from red Aqualon over 2" thick foam and feature a binding around the outer edge of each 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 them 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 to be printed on plugs at no extra charge.P/N 13-14111\$65.00



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 with a Kennon insulated Engine Blanket 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, an insulated engine cover is recommended. Single heater (Temps. down to 15°F)P/N 13-03171\$149.00 Double heater (Temps. below 15°F)P/N 13-03172\$240.95



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. Printed on one side 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 following part no's. to specify aircraft. C-150 (all)P/N 13-02620\$34.50 C-172 (1965+)P/N 13-02625\$39.95 C-182 (1971.5-1989) ..P/N 13-02630\$39.95 B33-35P/N 13-02637\$34.50 Universal kit w/square inlets (Sqr blocks you cut to fit) P/N 13-02645.....\$29.95/pr

KENNON WIND SPOILERS



Kennon Wind Spoilers 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, given a strong wind, the plane will fly without you and no tie down will restrain a flying airplane for long. During the stormy winter of 1998, over 200 airplanes were picked up and destroyed by strong winds. Kennon Wind Spoilers could have saved many of these aircraft. The wind spoilers cover 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....\$123.95/pr

LANCAIR & ZENAIR CANOPY COVERS



These custom designed covers for the Lancair 235/320 and the Zenair Zodiac canopy are made of acrylic "Sunbrella" fabric and are available in blue, grey, 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 adjustments provide tight fit. These covers will protect your avionics and interior from sunlight and heat damage.

Lancair			Zenair		
Color	Part no.	Price	Color	Part no.	Price
Blue Cover	13-14110	\$308.95	Blue Cover	13-14140	\$336.95



ENGINE INTAKE COVER

Kennon's Low Wing Cabin Cover covers the top of the cabin, the antennae and the entire window area. Kennon Cabin Covers 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 is safe to use 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 this item. There is an additional cost for the microfiber lining, and the cost varies based on aircraft.

Engine Intake Cover P/N 13-04047.....\$337.95



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 of aircraft when ordering. Color: Black or Blue.

Small for aircraft up to 21 ft long, wingspan to 31 ft.P/N 13-14145 ..\$356.95 Med. for aircraft up to 30 ft long, wingspan to 37 ft.P/N 13-14146 ..\$474.95 Light Twin up to 35 ft long w/wingspan to 40 ft.P/N 13-14147 ..\$521.00

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 unserviceable 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 side windows. Include aircraft registration number to be printed on cover at no extra charge

High Wing Wrap-Around Cover - Cessna120-210, Cessna 337; L-19; PA10, PA22 including Pacer, Tripacer, Cub, Super Cub, Colt, Luscombe, Stinson 108, Aeronca, Citabria, Maule, Rockwell 685/690/980, Aviat/ Christian Husky, Lake Renegade
StandardP/N 13-14146-B\$319.95
DeluxeP/N 13-14146-D\$393.95

Low Wing w/2 Side Windows - Piper 140,150,160,180, Tomahawk, Ercoupe, Mooney, Piper Cherokee 235B, Piper Commanche (some but not all... ASK) Grumman StandardP/N 13-14147-B\$349.85
DeluxeP/N 13-14147-D\$424.95

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)
StandardP/N 13-14148-B\$393.95
DeluxeP/N 13-14148-D\$474.95

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)
StandardP/N 13-14149-B\$493.95
DeluxeP/N 13-14149-D\$590.00

Low Wing With 4 to 5 Side Windows - Piper Navajo Chiefton, Cheyenne, Cessna 340, 402, 414, 425, 441, Citation, Beech Duke
StandardP/N 13-14150-B\$594.95
DeluxeP/N 13-14150-D\$690.00



COWL PLUGS - AIRCRAFT COVERS - CONTROL LOCKS



COWL PLUGS

Cowl Plugs with attached "remove before flight" streamer for general aviation aircraft. Prevents bird and foreign objects from entering through 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 engineP/N 13-01742**\$59.95**
 Twin engineP/N 13-01743**\$77.50**

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 lubrication. The integral 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**\$154.95**

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 13-01745 **\$92.95/eng**

JET ENGINE COVERS



Made of extremely durable, water-proof and fire resistant Herculite, 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.
 P/N13-01973 **CALL FOR QUOTE**

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 additional intakes.

Engine Intake CoverP/N 7148**\$39.00**
 Intake Cover BibP/N 7133**\$4.65**

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 breathes and yet provides 85% shade factor from the suns 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 00-6P/N 13-03158**\$28.95**
 Medium fits tire size: 6.00 - 6/7.00-6P/N 13-03159**\$29.85**
 Large fits tire size: 6.50 - 8/8.50-10P/N 13-03160**\$34.75**

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 RedWing before flight, and RedWing is reuseable and unaffected by UV, water, or oils. Furnished in 3ft. sections which can be easily cut to smaller sections. P/N 13-02566**\$12.75**

BRUCE'S CUSTOM COVERS



Bruce's Custom Covers are available for the canopy/cabin of all airplanes and help keep the cabin interior cool and dry, and help keep the plexiglass clean. Covers are designed to enclose the windshield, windows, and upper portions of the doors. Some designs extend forward to protect the avionics bay, access panel, or forward baggage doors. Others extend downward to the wing, while others go back along the tail section. Canopy covers are normally made of Bruce's Silver Laminate, but can be made from Sunbrella on request. In addition to canopy covers, Bruce's also produces engine covers, propeller covers, engine plugs, pitot covers, prop tie down/exhaust cover sets, wing covers, etc. for jets and helicopters as well as piston and turboprop aircraft. To order, please provide the year, make, model and N number of your aircraft and we will furnish you with a spec sheet to be completed. We will provide you with a quotation on the cover(s) you require, and covers are shipped to you in 2-3 weeks.

CALL FOR QUOTE

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.

Small CessnaP/N 13-02851**\$77.95**
 Cessna 206P/N 13-03166**\$77.95**
 Cessna 210P/N 13-03165**\$77.95**
 Cessna 337P/N 13-03167**\$77.95**
 MooneyP/N 13-03168**\$599.95**

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 13-22700.....**\$17.95**

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 **\$37.50/pr**

PS

BANNERS - PLANE LOCKS

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 wont rub against painted surfaces. Each banner is 9" x 23", made of heavyweight rubberized Nylon thats weather-repellent and resists tearing.

P/N 5412\$18.95



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. Comes complete with an adjusting tool, a Do Not Tow flag, a decal for the window, a key chain, and instructions. Wt: 2.2 lbs.

CONTROL WHEEL AIRCRAFT

Aircraft	Part No.	Price
PA-28, PA-32, PA-24, PA-30 & PA-39, PA-32R, PA-34 & PA-44	13-00855	\$119.95
Commander 112 / 114	13-32730	\$126.95
Mooney, Grumman Goose, Maule (Tricycle gear & Seaplane) PA-23, & Grumman American, Myers 200 & Commander200	13-00863	\$126.95
Cessna Single engine 150&172's, Helio Courier, 295/395	13-00864	\$119.95
Cessna Single engine 180, 206 & 210's fixed & retract gear & Cessna 337	13-00865	\$126.95
Aerostar, Commander 500, Beech Baron, Bonanza, Duke & 18/C-45, Lake L-A-4 (except Renegade)	13-32790	\$126.95
Cessna Tailwheel, Stinson, Beech Staggerwing	13-32800	\$126.95
Lake Amphibian	13-32820	\$126.95
Beech King Air	13-32830	\$134.95
Cessna 310's	13-32840	\$134.95
Aeronca Chief 508, Taylorcraft BC 12-D, Stinson 108 & 108-1	13-32850	\$126.95
PA-38	13-32860	\$126.95
Maule (Tailwheel)	13-32871	\$126.95
Piper PA-31, Chieftain, Navajo, Chyenne	13-32880	\$125.95
Socata (Trinidad), Grumman Widgeon	13-32890	\$125.95
Seawind	13-32885	\$126.95
Dehaviland Beaver	13-00866	\$126.95
Cessna Twins (except 337 & 310)	13-00867	\$134.95
Piper Malibu	13-00868	\$134.95

STICK CONTROL AIRCRAFT

Aircraft	Part No.	Price	Aircraft	Part No.	Price
J3 w/Shin	13-00871	\$167.95	Micco	13-00881	\$167.95
Knocker Tubes			Piper J-4	13-00882	\$167.95
Piper PA-12	13-00872	\$166.95	*Swift(only for stick)	13-00883	\$167.95
Piper PA-16	13-00873	\$166.95	RV-6	13-00884	\$167.95
Piper PA-11	13-00874	\$167.95	Luscombe	13-00885	\$167.95
Piper PA-14	13-00875	\$167.95	Kit Fox	13-00886	\$167.95
Piper PA-15/17	13-00876	\$167.95	Waco	13-00887	\$167.95
Piper PA-18			Lancair IV	13-00888	\$126.95
& *J3 Shin knockers	13-00877	\$167.95	Bellanca	13-00890	\$166.95
Piper PA-20	13-00878	\$168.95	Glaster	13-00890	\$166.95
Champ & Citabria	13-00879	\$167.95	YAK	13-00891	\$167.95
Huskie, Pitts	13-00880	\$167.95			

YORK ACCESSORIES

Do not throw away warning flag (included with each Gust-Lok™, but also sold separately)P/N 13-00869\$14.95
York Master Lock PadP/N 13-00870\$14.95



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 4-1/4" to 5-1/2"(wt: 2.4 lbs) and the large Prop Club® has a compressed opening range of 6" to 8"(wt: 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.

SMALL PROP CLUB 13-03378.....\$189.95
LARGE PROP CLUB 13-03379.....\$196.95

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 trailers, motorcycles, RV's, etc. Locks anything on wheels! Wt: 8 lbs.

P/N 13-00436\$121.95

THE PLANE LOCK



For Cessna C-172-210s, 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 outside the aircraft, the pilots 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.....\$121.95

AIRCRAFT THROTTLE LOCK



Protect your aircraft from theft! This throttle lock is recommended by the International Aviation Theft Bureau, Avemco Insurance Co., AOPA and other insurance companies. Available for vernier or non-vernier throttle.

Vernier LockP/N 13-08000\$72.50
Non-Vernier LockP/N 13-08100\$72.50

SKYLOK



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 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.....\$12.95

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 predriller polymer, which will react instantly to any source of heat or fire. This line (heat detector) is connected to reservoir containing fire-extinguishing agent: hexafluoropropane FE-36. Inside of the protected device (equipment) a loop made out of the heat detector breaks, 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. Ask for status of pending STCs.

Benefits: • Self contained • Non-conductive • Non-corrosive • Halon replacement environmentally friendly • No residue after activation and use • No cleaning • Can be used effectively on any electric, electronic and mechanical device • Highly effective in buses, trucks and RVs engine compartments • Simple to maintain.

System w/ 15' line ..P/N 13-03266.....\$698.00
System w/ 30' line ..P/N 13-03267.....\$749.00

PS

FIRE EXTINGUISHERS - RESCUE EQUIPMENT

PORTABLE 1211-1301 HALON FIRE EXTINGUISHERS



H3R's Halon extinguishers, widely regarded as extinguisher of choice in the aviation industry, extinguishes fires without a mess and it does not require taking a plane out of service for clean-up; a costly process to both the aircraft owner & insurance carrier. The heat-seeking quality of the Halon gas makes it a superior extinguisher product. Available in 6 sizes.

Halon Blend Units 1211-1301: • Slightly more effective because Halon 1301, which acts as a propellant, is also a fire extinguishing agent. • No need for a pressure gauge or for recharging • Lighter & somewhat less durable due to the aluminum canister & plastic parts For aviation use only

Halon 1211 units (all other units): • Slightly less effective than the Halon blends because Nitrogen is used as a propellant • Pressure gauge is necessary (to enable check of Nitrogen content) • Recharging is necessary • Heavier and more durable due to steel construction • Aviation & non-aviation use **9lb, 13lb, 17lb, Halotron & Wheeled Units w/larger capacity also available**

HALON 1211-1301 BLEND UNITS	Part No.	Range	Price
RT A400 - 14 oz. (UL Rating 2B:C)	3-13-07650	4-6 ft	\$60.95
RT A600 - 1.2 lb. (UL Rating 2B:C)	3-13-07655	6-8 ft	\$95.00
RT A1200 - 2.5 lb. (UL Rating 5B:C)	3-13-07660	7-9 ft	\$141.95

HALON 1211 UNITS	Part No.	Range	Price
A344T - 1.3 lb. (UL Rating 2B:C)	3-13-01993	9-12 ft	\$79.95
A344TC - 1.3 lb. (UL Rating 2B:C)	3-13-02546	9-12 ft	\$99.95
C352TS - 2.5 lb. (UL Rating 5B:C)	3-13-01966	9-15 ft	\$128.95
C352TSL - 2.5 lb. (UL Rating 5B:C)	3-13-02547	9-15 ft	\$164.95
C354TS - 3.0 lb. (UL Rating 5B:C)	3-13-02548	9-15 ft	\$146.95
A1600 - 3.5 lb. (UL Rating 1A:5B:C)	3-13-07665	8-10 ft	\$168.95
B355T - 5.0 lb. (UL Rating 10B:C)	3-13-02545	9-15 ft	\$179.95

SAFECRAFT FIRE PROTECTION SYSTEMS



Model "AS" is a fire extinguisher for light aircraft. Features a compact swivel discharge head design that is smaller than most extinguishers. The swivel head can be rotated and allows 2 separate discharge lines, thus increasing installation flexibility. The discharge head is machined from billet aluminum and is pull cable actuated. Cylinders are white powder coated with red aluminum anodized heads. US DOT approved and capable of being refilled. All halon is recycled to the original military specification and confirmed by an independent laboratory, assuring the highest quality and dependability. Model "AS" extinguishers are available separately for existing installations or in kits that include installation hardware. **Features:** •Lightweight US DOT approved cylinder & head combo •Swivel head for easy installation •Dual discharge outlets •Pull cable activation •Mil-Spec quality Halon 1301 •Formed aluminum mount bracket(s) •Aerospace T bolt mounting clamps. **Available Options:** •Polished cylinder finish •Brushed alum. finish discharge head and brackets •Plumbing, fittings & nozzles • Spare filled cylinders •Installation & plumbing design •Bulkhead mount discharge nozzles

AeroSafe Model "AS" Specifications

Part No.	Agent Qty.	Overall Length	Overall Diamtr.	Ext. Wt. (Lbs.)	Kit Wt. (Lbs.)	Kit Price
13-01634	3 Lbs	12.8"	3.2"	4.5	5.96	\$383.95
13-01633	5 Lbs	15.4"	3.5"	6.5	7.96	\$379.00

FLAMESTOP FIRE SUPPRESSANT



FlameStop Fire Suppressant is a 16oz aluminum canister that is portable, lightweight, reusable, recyclable, and safe. So portable, you can keep a canister available anywhere a potential fire can start. FlameStop is rated Class A & B and will stop most small fires (i.e. wood, plastic, paper, flammable liquids, grease, oil) NOTE: Do not use on Class C Electrical fires. FlameStop Fire Suppressant stops small fires fast. It also encapsulates the molecules that cause toxic smoke reducing the amount of smoke damage and making it easier to see and breathe in an emergency situation and most importantly it will not reignite. FlameStop is environmentally safe and 100% biodegradable with very little mess to clean up. The new spray technology is powered by air and allows the user to spray FlameStop in any direction, even upside down. This new canister dispensing system uses natural air instead of pressurized propellants (CFCs/ chlorofluorocarbons) which can be harmful to the environment.

P/N 13-01684\$17.95

FIREFLY PLUS FLASHLIGHT/STROBE



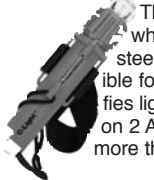
The Firefly Plus is a flashlight/emergency locator strobe which is visible for over one mile. The operating life of the strobe is 10 hours, and 2 hours for the flashlight (continuous). Firefly Plus operates on 2 AA batteries (not included) and made of durable ABS plastic. Waterproof & weighs 4 oz. Size: 2" dia. x 5-3/8"h. Excellent addition to any aircraft or home emergency kit. P/N 13-54050\$35.80

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 straps. The omni-directional strobe light is visible up to 2 miles. C-Strobe features a slim, light-weight, waterproof case and operates more than 8 hrs (continuous). Operates on 2 AA alkaline batteries (not included). P/N 13-54020\$27.95

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 light is visible for 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 (continuous). P/N 13-54030\$12.95

RAPIDFIRE VEST LIGHT



RapidFire Vest Light is a self-contained emergency rescue lamp. It's small, compact, rugged, and waterproof 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.....\$26.95

FIREFLY₂ RESCUE LITE



Small enough to fit into your pocket, this light-weight strobe lite will penetrate fog and rain. The secret is the high intensity 360° xenon strobe beacon that will provide up to 15 miles visibility. Its blinking white flash puts out 250,000 lumens for up to 9 continuous hrs (50 times per min.) Waterproof, shockproof & vibration proof it operates on AA batteries (not included). FAA approved. Firefly₂ Rescue LiteP/N 13-54001\$95.25

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-replaceable 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 Vecta2™ Direction Finder • Floats if dropped overboard • 121.5 MHz (SAR frequency) provides rescue forces with pinpoint homing • Antenna maximizes peak effective radiating power when fully extended. Compact size with antenna folded; durable double-braided 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.....\$209.95

RESCUE LASER FLARE MAGNUM™



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. MAGNUM 72 HR RECUE LASER FLARE P/N 13-01924.....\$109.95

Similar Items Part No. Price Buy

15 HR RESCUE LASER FLARE P/N 13-01923.....\$99.95
5 HOUR RESCUE LASER LIGHT P/N 13-01922\$89.95

PS

SMOKE HOODS - LIFE VESTS

PARAT C EMERGENCY SMOKE HOOD

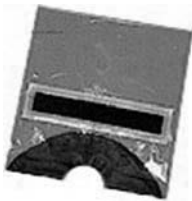


The PARAT C is a lightweight, portable easy to don smoke escape hood designed for self-rescue in the event of a fire. The PARAT C protects the wearer for a minimum of 15 minutes from smoke, carbon monoxide and toxic gases normally present during a fire. It is ideal as a personal escape device which can be used in emergency situations occurring in homes, office or apartment buildings, schools, hospitals, plant facilities and hotels.

FEATURES: Hood made from flame-retardant, self-extinguishing 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.

P/N 13-04232.....\$138.95

PEACE OF MIND SMOKE HOODS



Peace of Mind hoods are emergency respiratory aids that give you the necessary protection to evacuate any area where toxic fumes or smoke could indispose a victim. Also provides protection for eyes, hair, & free 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, fast, 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.

P/N 13-02731\$38.95

STAY ALIVE LIFE VESTS



StayAlive includes the following: • 45 ft. Buoyant heaving line (Canadian Coast Guard requirement) • Watertite Orion flashlight (Canadian requirement) • Sound signaling device, whistle (US & Canadian requirement) • Collapseable bailer (Canadian requirement) • Floating international distress flag • Manuel propelling device • Signaling mirror with lanyard • Inflatable signaling device with reflective tape molded onto the unit • Buddy lanyard to secure group together • 2 phosphorescent light sticks • Neoprene S.O.L.A.S. light attachment loop and eye-let system • Aqua-lite flotation foam • Patent pending, 2001 • U.S. Coast Guard Approved • Canadian Coast Guard Approved • Single size fits most: UNIVERSAL • Color: International Red for high visibility • Reflective tape on shoulder area • D-rings on shoulder and bottom to attach signaling devices and crew • Leg straps that can be adjusted around crotch area to keep StayAlive from riding up around wearer. Very useful if in the water for prolonged period of time.

P/N 13-02708\$95.50/ea

SURVIVAL PRODUCTS LIFE RAFTS



Perfect for general aviation. Small and compact it fits in a lightweight valise 4" x 12" x 14" and weighs only 12 lbs. But don't be fooled by its size, price or weight. This raft will do the job for you under the most adverse condition. It provides a fresh water buoyancy of 190 lbs. per person and a deck area of 3.6' per person which exceeds all

Govt. standards. Inflated, the raft is 46' inside and 68' outside and every square inch has been meticulously made from raw materials and components tested for their durability and life expectancy. Every raft is pressure tested and all seams and adhesive bonds rigorously checked prior to release. Raft includes sea anchor, bailing bucket, hand inflation pump, and CO inflation system. Optional survival equipment shown below. 6-13 person raft is 5' x 12' x 14' and weighs 18 lbs. Available in non-TSO'd and TSO'd versions.

- Non-TSO'd 4-6 Person Life RaftP/N 13-31610\$895.00
- Non-TSO'd 6-13 Person Life RaftP/N 13-31660..\$1,159.00
- Non-TSO'd 4-6 Person Basic Raft w/o canopy P/N 13-31670..\$1,195.00
- TSO'd 4-6 Person Raft w/canopy onlyP/N 13-31680..\$1,350.00
- TSO'd 4-6 Person Raft w/91 equipP/N 13-31690..\$1,585.00
- TSO'd 4-6 Person Raft w/121 equipP/N 13-31700..\$1,563.00
- TSO'd 4-6 Person Raft w/135 equipP/N 13-31710..\$1,984.00
- Non-TSO'd 8-12 Person Basic Raft w/o canopy ..P/N 13-31715..\$1,595.00
- TSO'd 8-12 Person Raft w/canopy only ..P/N 13-31725..\$1,798.00
- TSO'd 8-12 Person Raft w/91 equipP/N 13-31735..\$2,036.00
- TSO'd 8-12 Person Raft w/121 equipP/N 13-31745..\$2,134.00
- TSO'd 8-12 Person Raft w/135 equipP/N 13-31755..\$2,397.00

SURVIVAL RAFT ACCESSORY EQUIPMENT KITS

Far 91 Kits includes: canopy with inflatable mast, equipment container, signal flag, 3 signal flares, two cell flashlight with alkaline batteries, first aid kit, raft repair kit, sea dye marker, signal mirror, food rations, water rations, and signal whistle. Far 121 Kits includes: All of above plus: utility knife, survival manual and sponge. Far 135 Kits included: all of above plus: magnetic compass, eight pint desalter, fishing kit, 75 ft. retaining line, two paddles and radar reflector.

- Far 91 Emergency KitP/N 13-31620\$268.00
- Far 121 Emergency KitP/N 13-31630\$339.00
- Far 135 Emergency KitP/N 13-31650\$695.00

SOSPENDERS FLOTATION VEST



Sospenders are a compact personal flotation device that takes up a small amount of space in the aircraft for a great amount of peace of mind. A tug on the rip cord, and they transform from nearly nothing to providing 35 lbs of buoyancy in seconds. They feature a heavy duty nylon shroud and padding to protect against abrasions and punctures, emergency whistle, 2" webbing for superior comfort, heat welded seams for leak-proof integrity, and are sized for adults over 80 lbs. U.S. Coast Guard Approved Type III PFD. Color: Navy Green. Made in USA.

P/N 13-00020\$118.95

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 rechargeable 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.

P/N 13-31640\$44.00

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 **\$264.95**

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 carries with

contents in smaller quantities. Ideal for general aviation. Includes all basic necessities in a compact lightweight package.P/N 9302
\$36.50

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. (Battery not included).
P/N 9970**\$70.10**

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 the fact, Motion Eaze does the job.

No matter, if it's sea sickness, car sickness, air sickness or any activity where 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 no known side effects.
P/N 13-02732**\$15.95**

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**\$9.95/pr**

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**\$3.95**

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. Telescope quality second surface 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 securing to person or liferaft. Size: 4.25x2.75x0.19 in. (10.8x7x0.5cm); Wt: 1.8 oz (51 g)
P/N 13-03177**\$11.90**

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"; wt:10 oz.
P/N 9145**\$19.85**

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**\$33.40**

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**\$19.70**

AIRCRAFT EMERGENCY SURVIVAL KIT

This is 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 (54' x 48") durable, waterproof blanket, & assorted first aid supplies, matches etc.



P/N 9641**\$29.60**

PS

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 saving 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!

13-03596\$350.00

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, the ESK-02 carries a five-year shelf life on food and water. Its affordable price makes it a great choice as a premium/incentive item, corporate gift, or



employee award.

13-03606\$27.90

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 spare" 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!

13-03607\$55.70

2-PERSON EMERGENCY SURVIVAL KIT

With over 75 items, the ESK-04 is the Big Brother to the ESK-02.



Designed to support two people for up to three days, the ESK-04 includes general and medical supplies with the addition of a quality AM/FM radio (batteries included). The ESK-04 also contains the Wallace Guidebook. More than a first aid manual, the guidebook includes innovative survival tips along with basic medical techniques and information.

13-03608\$61.85

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!

13-03604\$2.85



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, SUV's, and awnings.

13-04055\$19.95

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\$7.70

COCOON SLEEPING BAG



The All Weather Pocket Size Sleeping Bag The Cocoon Sleeping Bag (84" x 36") 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 Cocoon is waterproof, reusable, and portable. Keep several on hand for the unexpected!

P/N 13-03603\$6.45

EMERGENCY FOOD RATIONS



MAINSTAY™ FOOD PACKAGE - Mainstay™ 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 land-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™ 360013-03599\$6.60

Mainstay™ 240013-03601\$4.80

Mainstay™ 120013-03602\$3.35

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\$14.60



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.

13-03597\$5.45



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\$14.95



Horizontal Bracket

Black molded plastic bracket for underseat installation
P/N 13-04169\$18.95



Vertical Bracket

Black molded plastic bracket for vertical installation.
P/N 13-04170\$10.95



Venturi

Black molded plastic venturi mounts on fuselage bottom and produces required suction to horn and outlet tubes for fluid ejection.
P/N 13-04171\$25.20



Horn and Valve Assembly

P/N 13-04167.....\$79.50

Tee P/N 13-04172.....\$11.30

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.....\$1.40

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\$2.25

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\$0.45/pair



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 \$6.35

LADY J ADAPTER



The anatomically designed funnel snaps in and out of the little John. It can be used sitting or even standing. Clean white plastic.

P/N 9745 \$5.85

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 used as a container for those situation where a wash-room 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 liter 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 \$6.95

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 \$4.95

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 during use. Convenient, sanitary and compact, TravelJohn 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-packP/N 13-00894.....\$6.80

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, 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 afloat 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; Stored size: 3.5" x 7.5"
P/N SAR-6\$39.00/ea.



PS

CO² DETECTORS - PILOT SUPPLIES

CO GUARDIAN CARBON MONOXIDE DETECTORS

CO Guardian uses a patent-pending technology to compensate for changes in an airplane due to temperature and humidity. The detector has three (3) warning systems: audio, digital, and numeric warnings 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 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 Readout • Front panel lighting (Green, Amber & Red) • CO Sensor tested to 13,500ft • Built in Temperature compensating circuit • Built in Humidity compensating circuit. P/N 13-01639**\$179.00**



Model Aero-152WD - Features: • Max power consumption = Less than 1W • Wt: 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 13,500 ft • Built in temperature compensating circuit • Built in Humidity compensating circuit. P/N 13-01640**\$149.00**



Model Aero-252A - Features: • Max power consumption = Less than 1W • Wt: approx. 3.2 oz • Product shielded to prevent RMI (Radio Magnetic Interference) with Aircraft systems • Audible alarm with varying pitch at 85DB • Digital CO Level Readout • Front panel lighting (Green, Amber & Red) • CO Sensor tested to 13,500 ft • Built in Temperature compensating circuit • Built in Humidity compensating circuit. P/N 13-01641**\$340.00**



Model Aero-352 - Features: • Remote Light/ Annunciator Panel Relay Output • Max power consumption = Less than 1W • Wt: approx. 3.5 oz • Internal Fan for optimum sensing • Designed for all Piston (Single and Twin Engine Aircraft) • Product shielded to prevent RMI (Radio Magnetic Interference) with Aircraft systems • Audible alarm with varying pitch at 85D • Front panel lighting (Green and Red) • CO Sensor tested to 13,500ft. • Temp. range 20°-110°F • Built in Temperature compensating circuit P/N 13-01642**\$299.00**



Model Aero-452 - FAA Approved. Model 452 is very small (1.25Sx2.5S) just slightly bigger than your standard Hobbs meter. This unit has built in pressure sensor to compensate for altitude up to 25,000 feet. It also has a built in heater so it can operate at -20°C and certified to +70°C. The unit also meets all DO 160 environmental requirements including interference. This unit has remote relay, lights; audio & visual indications for the pilot, and can easily integrate with your cockpit design. Designed to meet FAA requirement 23.831 for CO in the cockpit for both piston and turbine aircraft. This unit can be installed in about 4 hours and can be mounted anywhere on the plane within pilots reach. Model 452 has a built in air circulation fan that constantly draws monitors for CO in the cockpit. P/N 13-02070**\$459.00**
28VP/N 13-02071**\$459.00**



Model Aero 552 - This unit is a replacement for the 2.25" 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, pressure density altitude readout for takeoff. Cabin altitude 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. P/N 13-02569**\$795.00**

AERO STEP PORTABLE LADDER



Aero Step is the world's first and only articulated step-stool. Used for many years by owners of high-wing aircraft to verify fuel levels and closed fuel caps before flight. Ideal for home, camping, fishing, RV's, etc.—serves either as a seat or mini ladder. Features 4 adjustable faces while maintaining stability. Lightweight (2.5lbs.) and portable. Height: Basic - 19.5", Extended - 20.5". Top step seat: 3.5" x 8". Folds to a compact 20" x 14" x 4". P/N 13-17900**\$48.00**



SUPERLITE FOLDING 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"x19"x19". Folds to 29.5"x19"x2". P/N 13-00893**\$92.50**

UNIVERSAL BEVERAGE HOLDER



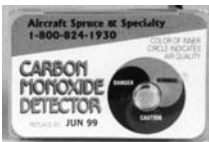
This Universal Beverage Holder made of billet aluminum installs easily in any thickness dash or instrument panel. Available in two styles, with square or oval face-polished surfaces, its compact design permits vast installation possibilities. P/N 13-03792**\$128.00**
13-03793**\$128.00**

COSTAR PORTABLE CARBON MONOXIDE DETECTOR



Features: • Small size (3-3/4" x 2-5/8" x 1") clips to belt, pocket or vehicle visor. • Ultimate reliability: each unit is 100% tested in CO. The P-1 is designed specifically for person and automotive use. • Battery operated: 9V alkaline battery included • Microprocessor Intelligence: Continuously self-tests every 10 min. and supervises sensor and alarm circuit status • 5 year limited warranty. Made in USA. P/N 13-02966**\$44.95**

LONG LIFE CARBON MONOXIDE DETECTOR

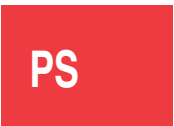


No longer do you have to replace that Carbon Monoxide Detector every 28 days, the new Quantum Eye Carbon monoxide detector offers a minimum 18 months of sensor life. P/N 09-35601**\$5.90**

STANDARD CARBON MONOXIDE DETECTOR



Carbon monoxide is odorless 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. P/N 09-35600**\$5.40**
5 or more**\$3.15/ea.**



WINDMETERS - WEATHER STATIONS

SKYWATCH ELITE WINDMETER

Current, average, maximum windspeed • Weatherproof current, minimum, maximum temperature • Windchill. The Omni-directional windmeter. This precision Swiss-made instrument has multi-directional cups which eliminate the need to point directly into the wind. It reads in tenths, allows a choice of measurement units, including Beaufort and the cap has analog compass for use in deterring wind direction. The Elite can be handled, or stand alone. It's threaded for a tripod or unipod, or an optional stainless steel bracket for (A) back stay or (B) rail attachment. The cap locks on the bottom or the unit for the convenience.



Backstay MountP/N 13-02203\$12.50
 Rail AttachmentP/N 13-02204\$12.50

WindScribe Handheld Wind Meter

WindScribe is a precise, handheld wind meter (anemometer). In addition to registering the current wind speed, the WindScribe also measures maximum headwind, maximum tailwind, a five-second average wind, and a running average wind. Speeds can be displayed in both U.S. and metric units, and the unit also records temperature - useful for figuring out whether fog may form soon - and wind chill.



The WindScribe weighs 3.5 ounces and comes with a lanyard. A velcro strap and mounting bracket are included.

P/N 13-04019\$115.95

WIND WIZARD WIND SPEED INDICATOR ECONOMY MODEL - ACCURATE & COMPACT

A single scale eliminates the need to shift back and forth between two scales when wind conditions are variable or gusty. The scales is conveniently calibrated in miles/hour, meters/ second and Beaufort. To provide higher resolution, the single scale is expanded in the lower wind speed range of 0-20 MPH (0-8.9 meters/sec). Slips easily into a shirt or coat pocket. The convenient safety wrist strap gives added security in stronger winds, and stores out of the way in the folding handle. Constructed of high impact plastic and corrosion resistant metals. It comes complete with wrist lanyard and vinyl leather-like carrying case. It has no batteries to wear down and therefore is always ready to use year after year.



P/N 13-18520\$31.95

WEATHER WIZARD III WEATHER STATIONS

Weather Wizard includes all of the most requested features of a professional-quality weather station: inside and outside temperature, wind direction, wind speed, and wind chill. Highs and lows are maintained for most functions, and may be quickly viewed along with the time and date they occurred. Programmable alarms alert you to changes in weather conditions. Information may be displayed in U.S. or metric units of measure. Wind speed displayed in either mph, kph, kts, or meters/sec. Mounting base allows you to place the Weather Wizard III on a desk, table or shelf, or to mount it on a wall. The autoscan routine reviews all weather conditions, or you may enter your own scan selections. Compact size: 5.25"x5-7/8"x3" (133 x 149 x 76 mm).



Weather Wizard IIIP/N 13-14010 ..\$195.00
 Optional Rain Collector (0.1 mm).....P/N 13-14035\$76.50
 Optional Rain Collector (0.2 mm).....P/N 13-14040\$75.00
 Mounting TripodP/N 13-14016\$50.00

Call for special pricing!

SM-28 SKYMASTER WEATHERMETER

Skymaster Weathermeter gives you advanced weather information in a convenient pocket-knife design, that will fit in the palm of your hand.



Features: •Windspeed (Current, Avg, & Max) •Temp w/ Windchill & Heat Index •Relative Humidity w/ Dewpoint •Barometric Pressure & 16-Hr History Bar Graph •Storm Audio Alarm •Altitude

•Pocket-knife design •Replaceable 400 hour battery •Replaceable plastic impeller won't corrode •Comes with lanyard •Threaded for tripod mounting •High visibility case •Floats •Water resistant to 4"

Specifications: Accuracy: +/-3% Windspeed; +/-2 F° Temp/Windchill; +/-3% rH; +/- 3°F Dew Point; +/- 3°F Heat Index; +/-3 hpa Barometric Pressure; Ranges: Wind .4-89 MPH; Temp +5° to +122°F; Windchill -22° to +158°F; Dew Point -31.2° to +155.8°F; Heat Index +69.8 to +155.8°F; rH 0-99%; Barometer 400-1100 hpa; Altitude -650 to 9000 meters; **Optional Units:** Knots, MPH, KPH, M/Sec, Ft/Min, Beaufort Scale - F or C; **Response Times:** Current Windspeed; Ave. over 2 sec; Ave. Wind 5 sec; Max Wind 2 sec gust; Temp/windchill/rH/dew point 1 min; 15 min sampling Barometer; **Power:** CR2032 Lithium battery (included) **Size:** 5.9 x 2.1 x .85 inches; **Weight:** 3.9 oz

P/N 13-02957\$126.95

SKYMATE WINDMETER

Skymate's unique pocket-knife design, conveniently protects the unit, when not in use. Windspeed, temperature functions, and wind chill are included in this highly accurate yet value-priced instrument. Current, maximum windspeed, Average windspeed over 5, 10, or 13 seconds, current temp & windchill. Choose any measurement unit. Reads in tenths. Replaceable 400 hour lithium battery Data lock feature. Replaceable plastic impeller won't corrode. Comes with lanyard. Threaded for tripod mounting.



P/N 13-00086\$98.50

SKYMATE PLUS

Convenient pocket knife design, accuracy, features and accurate humidity readings make this a must have for weather enthusiast. Features: • Current, maximum windspeed • Average windspeed over 5, 10, or 13 seconds • Current temp & windchill • Relative Humidity & Dewpoint • Choose any measurement unit • Reads in tenths • Replaceable 400 hour lithium battery • Data Hold to freeze most recent display • Replaceable plastic impeller won't corrode • Comes with lanyard • Threaded for tripod mounting • Unique pocket-knife design to protect the unit when not in use.



P/N 13-01960\$165.00

Adjustable nylon case (fits all models)

P/N 13-02202\$10.50

Wind tunnel (maximize wind meter accuracy)

P/N 13-02201\$23.50

PS

FLASHLIGHTS

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, corrosion resistant, and features 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.
Bulb: P/N 13-02320...\$4.80 Flashlight: P/N 13-01067...\$4.80



MAG LITE

More than a flashlight. Mag-Lite has the look and feel that every professional demands. The patented cam-action adjustable beam and sealed self-cleaning 3-way switch makes this the most versatile, dependable light on the market today. Additional features: a "flush" sealed rubber thumb button, Lexan lens and reflector, anodized aircraft aluminum housing with knurled grip, O-ring sealed for maximum water resistance, and spare bulb housed in tail cap. Every Mag-Lite carries a limited, lifetime warranty. Available in 2, 3, 4 & 6 D-cell models.

MINI-MAG LITE - Pocket size! Uses 2 AA size batteries (not included). Black (13-07400), Blue (13-01302)\$13.85

MAG LITES		
Model No.	No. of D-Cells	Price
ML-2	2	\$19.10
ML-3	3	\$23.85
ML-4	4	\$24.40
ML-6	6	\$26.60

REPLACEMENT BULBS	
Model No.	Price
*	----
MS-3	\$3.50
MS-4	\$3.65
MS-6	\$3.95

*Not available for 2-cell lights.

ANODIZED ALUMINUM MINI FLASHLIGHTS

Virtually indestructible, this little flashlight provides a surprising amount of light, and delivers it to a spot or area with a twist of the focusing ring. Weighs less than 3 oz. Made of aircraft aluminum with anodized finish. Completely rust-and corrosion-proof. The Lexan lens and reflector are shatterproof. A knurled barrel helps your grip. Measures 5.5" long. A spare bulb is included in the tail cap. Requires 2 AA batteries (not included).



- Blue Mini FlashlightP/N 13-01302\$14.95
- Black Mini FlashlightP/N 13-07400\$13.85
- Alkaline AA batteries (2)P/N 5750\$1.95
- Replacement bulbs (2)P/N 5856\$2.90

SAFE-LIGHT SUPER BRIGHT FLASHLIGHTS

The New Safe-Light Super Bright is lightweight and palm-size yet powerful, with ultra-long battery life(9v battery included). A True Pilot's & Personal Safety Flashlight. With Emergency Strobe plus other essential safety modes. Modes: Constant Glow, Power-Save, High Beam, Flashing Emergency Strobe. L.E.D.: Uses Nichia latest Super Bright LED giving a wide, bright beam. The Power-Save mode can be particularly useful in the cockpit. Also available with blue, green or red LED. Rubber, non-slip, shock-resistant casing. Simple battery loading. Waterproof in shallow water. Comes with removable swivel belt clip with magnet embedded. Clip to the belt - swivel to point forwards to light the way - or backwards to be seen - and you have hands-free lighting. This new addition to the Safe-Light range is a superb flashlight. Its advanced micro circuitry provides big flashlight power in a palm-held that is light weight and easy to carry, rugged, with extra-long battery life.

- SAFE-LIGHT BRIGHT W/WHITE LED13-04151\$13.85
- SAFE-LIGHT BRIGHT W/BLUE LED13-04152\$13.85
- SAFE-LIGHT BRIGHT W/GREEN LED13-04153\$13.85
- SAFE-LIGHT BRIGHT W/RED LED13-04154\$13.85

FLITE LITE EMERGENCY COCKPIT LIGHTING

FliteLite is the perfect emergency back-up light source for any pilot. It's non-flammable & non toxic. It contains no batteries to go dead, bulbs to burn out, or circuits to fail. The dependable chemical light source used in our FliteLite has a 20 year history of military public safety use. Flite Lite is a patented chemical light that provides adequate cockpit illumination for up to 2 hours. Each Flite Lite has a shelf life of over 2 years. Its' self sticking adhesive backing allows the light to be affixed to the shirt, blouse of the pilot and or co-pilot, thus providing hands free lighting. The brilliant green light emitted provides sufficient lighting to monitor vital cockpit instruments, read charts, & review emergency flight operation procedures.

- 2 light package in Cordura pouchP/N 13-00841\$0.95
- Replacement Cordura Pouch.....P/N 13-00843\$4.85

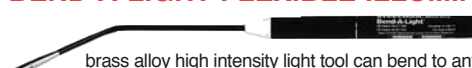


FLIGHT LIGHT PEN

See what you write — even at night! Saves pilots from using an overhead light when writing in a low-light situation, 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 positive on/off flashlight switch helps preserve battery life. The smooth, ball-point pen with blue ink features a rubber grip for comfortable writing. The clip on the cap allows for easy storage. An excellent addition to all flight bags! Includes 2 LED lights, and 2 ton cell batteries. 5 1/4" x 3/4".
P/N 13-01099\$6.60

BEND-A-LIGHT FLEXIBLE ILLUMINATION TOOL

Our new Bend-A-Light Mini-Pro flexible brass alloy high intensity light tool can bend to any configuration and illumination hard-to-reach areas where conventional lighting cannot go. The incredibly brilliant light beam penetrates anywhere! Ideal for use in aircraft, electronics, automobile maintenance, repairs, hobbies, around the house and more. You bend it...and it holds! Made in U.S.A. and furnished complete w/ AAA batteries.
P/N 12-15005\$17.50



AVIATOR'S QUIQLITE

The new Aviator's QuiqLite is the newest personal light device for pilots. Extra Bright LED, available with Red, Green, White or Blue Light. Handy pocket clip and rotating arm make this a "Hands-Free" light. Rotating "light arm" allows you to place the light where you need it. Push-button On-Off switch with convenient 7 minute Auto-Off feature. Over 40 hours of light using replaceable lithium watch batteries (included). Fits easily into shirt or uniform pocket. The hand-free micro-lite, great solution for poor lighting conditions. Utilized by the police, pilots, and the military. QuiqLite is the 1st choice.



- Blue LED QuiqLiteP/N 13-02719\$17.50
- Green LED QuiqLiteP/N 13-02728\$21.80
- Red LED QuiqLiteP/N 13-02729\$21.80
- White LED QuiqLiteP/N 13-02730\$21.80

MasterVision Cap Light

The best hands free flashlights available! Bright lightweight LED flashlight that clips to a regular cap. Water resistant!, Great for night flying! Weighs only 1.24 ounces! 3 LED bulbs with 10,000 hour burn time! 4 lithium coin cell batteries for approximately 24 hours of life!



- G1 ORIGINAL CATS EYE CAP LIGHT13-03723.....\$17.85
- G1 STALKER CATS EYE CAP-LIGHT13-03724.....\$17.85
- G1 STEALTH CATS EYE CAP-LIGHT13-03725.....\$16.95
- CATS EYE BATTERY13-03726.....\$4.85
- G2 WHITE CATS EYE CAPLIGHT13-04224.....\$18.95
- G2 GREEN CATS EYE CAPLIGHT13-04225.....\$18.95
- G2 RED CATS EYE CAPLIGHT13-04226.....\$18.95

PLOT 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 diffused-flood beam pattern is perfect for nighttime cockpit operations, be they emergency lights-out panel situations (without holding a flashlight in your mouth!), or the normal reading of charts and approach plates (without fumbling for the flashlight that just fell to the floor). It's also great for hands-free preflight, postflight, inspection, and maintenance operations. It's single electronic switch allows you to adjust the headlamps light intensity for your specific conditions, as well as activating the emergency locator strobe mode. Adjustable, pivoting head allows you to place the light beam exactly where you need it without excessive head movements. The Pilot is a compact, ultra-lightweight, waterproof, hands-free lighting system thats comfortable to wear (even with headphones), is furnished with a hard clamshell case, and comes with a 3yr warranty.
P/N 12-00719\$34.50



PILOT FLASHLIGHTS

LED LIGHT PRODUCTS

LIGHT-WAVE 2000 FLASHLIGHT



With 4 super bright solid state light emitting diode (LED) lights that don't burn out, space age solid state circuitry for 14 times longer battery life, waterproof and shockproof construction, the Lightwave 2000 is much more than a regular flashlight – it's a breakthrough portable lighting system for the new millennium!

Features: • Unbelievable super bright lighting system • Truly waterproof, not just water resistant • Space age solid state circuitry • Lifetime Warranty • Powered by 4 high intensity LED lights • Shockproof— built like no other flashlight!

White ..P/N 13-00494\$26.95 Green.....P/N 13-00496 ..\$26.95
BlueP/N 13-00497\$26.95

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 high! Not bad for a 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 finish to military specifications, because it is the best and the toughest. It is powered by 2 lithium batteries, is shockproof, water-resistant and comes with a lifetime guarantee (excluding batteries and lamps). Length: 5.9"

The **L1 Lumamax** features a 1W Luxeon LED which produces 15 lumens from one Surefire 3V lithium battery, which is three times brighter than a conventional mini light running on two AA alkaline. For the pilot needing only the soft light of LED lighting for cockpit illumination, the L1 Lumimax is an excellent choice. Length: 4.6"



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-specification finish, the pocket-size E2D Defender also features an optically-coated Pyrex® lens; high-energy, ten-year shelf-life lithium batteries; a stainless steel pocket clip, and law enforcement-style click-on/off momentary switching for blinding flashes or emergency signaling.



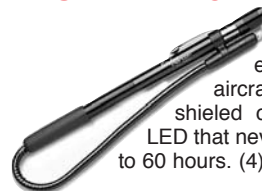
A2 Aviator with green LEDsP/N 13-02017\$195.00
A2 Aviator with white LEDsP/N 13-02018\$195.00
L1 Lumamax with white LEDP/N 13-02019\$135.00
L1 Lumamax with green LEDP/N 13-02020\$135.00
G2 Nitrolon flashlightP/N 13-02021\$36.00
E2d Defender flashlightP/N 13-03204\$110.00

LIGHTWAVE 4000 FLASHLIGHT



Super-bright, easier to see with white light! Solid-state Light Emitting Diodes (LED's) last thousands of hours Space-age solid state circuitry makes a set of batteries last up to over one month (of continuous use) Waterproof- designed for use in all weather conditions (to one foot, not for scuba diving) Shockproof-has withstood drop test of 4 feet onto concrete 3 year warrantee. The warranty covers everything except batteries and abuse High Impact composite ABS plastic case with genuine rubber over-molding Utilizes ten (not just one), high powered super bright white LED light sources Uses (3) D cell alkaline batteries - not included Push button for easy on / off Industrial grade switch, rated for 10,000 on-off operations Size: 2" diameter by 10.8" long. P/N 13-01698\$53.95

STREAMLIGHT FLEXIBLE FLASHLIGHT



The 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 white 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\$29.95

PELICAN AVIATION LIGHTS

VERSABRITE



This is the world's brightest swivel head pocket flashlight. The adjustable head swivels 180 degrees, enabling the pilot to direct the beam where he needs it. It is water resistant and mounts directly on the adhesive pad of yoke chart holders. Provides 6000 candlepower Xenon laser beam spot beam, and comes standard with clear, red, and blue-green lenses. Clips easily on shirts, belts, and caps for hands free use. Comes with multi-use velcro fasteners and 2 AA batteries. P/N 13-00561\$19.85
Versabrite mounting clips (1 top, 1 side mount)

VERSABRITE II



Versabrite II is a wide beam Versabrite for pilots. Provides a beam four times wider than standard Versabrite, and mount directly on the adhesive pad of Yoke chart holders. The 8000 candlepower xenon wide beam is ideal for reading maps on night flights. Head swivels 135 degrees. Furnished with clear lens as well as blue-green and red lenses for night use. Includes two AA batteries (5-6 hours use).....P/N 13-00564\$19.95
Replacement Xenon lampP/N 13-00566\$6.40

SUPER MITYLITE w/PELIKNIFF



This handy light features a 6000 candlepower pocket lite with a laser sharp pre-focused beam. Only 4.5" long, this light is virtually unbreakable and is submersible to 600 ft. Includes a lock back pocket knife which is 3" long when folded and features a 2" long stainless steel blade. Incl. 2 AA batteries, key chain ring, pocket clip.P/N 13-00567\$19.95

PILOT'S HANDY LANYARD LIGHT



This emergency light with a break-away neck lanyard is great for use around any aircraft. Ideal for pre-flight inspections after dark, providing you with a small, powerful flashlight which you can simply hang around your neck as you preflight the aircraft. Also makes the perfect cockpit light in an emergency. Furnished with blue-green and red lenses for night flying as well as a standard clear lens. Includes lanyard & 1 AAA battery. P/N 13-00571\$15.50

PS

ARM RESTS

ASTRO ARM FLASH-LIGHT HOLDERS MERCURY MODEL



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.

MERCURY CLAMP FLSHLT HOLDER. 13-04005.....\$19.75

ASTRO ARM FLASH-LIGHT 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.

MERCURY MAGNETIC FLSHLGHT HLDR 13-04006.....\$19.75

ASTRO ARM FLASH-LIGHT 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.

GEMINI CLAMP FLSHLT HOLDER BLK.. 13-04007.....\$29.95

ASTRO ARM FLASH-LIGHT 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.

GEMINI MAGNETIC FLSHLT HOLDER..13-04008.....\$29.95

THE PORTABLE ARMREST FOR PILOTS



Introducing the 100% portable center armrest for airplanes that makes flying comfortable. An ongoing problem for general aviation aircraft has been the absence of a center armrest for the pilot and co-pilot which leads to fatigue. Instant 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 any aircraft
- * Fits flat or bucket seats
- * Fits right and left seats
- * Ready to use in 1 second
- * Adjustable
- * Fits in flight bag
- * Lightweight aluminum

P/N 13-03154\$49.95



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 carpal tunnel syndrome. They can also be used for throttle rests. Color: Black. ABS plastic. Furnished as right/left set. P/N 13-03265\$28.85

HITCH COVERS



DESCRIPTION	PART #	PRICE
REMOVE BEFORE FLIGHT HITCH CVR	13-03545	\$26.95
AJO OVAL BLACK 2" HITCH COVER	13-04004	\$26.95
B25 BLACK OVAL 2" HITCH COVER	13-03530	\$26.95
T6 BLACK OVAL 2" HITCH COVER	13-03531	\$26.95
P17 BLACK OVAL 2" HITCH COVER	13-03532	\$26.95
B17 BLACK OVAL 2" HITCH COVER	13-03533	\$26.95
PA-18 OVAL BLCK 2" HITCH COVER	13-03534	\$26.95
L19 OVAL BLACK 2" HITCH COVER	13-03535	\$26.95
B24 OVAL BLACK 2" HITCH COVER	13-03536	\$26.95
P25 OVAL BLACK 2" HITCH COVER	13-03537	\$26.95
T28 OVAL BLACK 2" HITCH COVER	13-03538	\$26.95
L29 OVAL BLACK 2" HITCH COVER	13-03539	\$26.95
T34 OVAL BLACK 2" HITCH COVER	13-03540	\$26.95
L39 OVAL BLACK 2" HITCH COVER	13-03541	\$26.95
P51 OVAL BLACK 2" HITCH COVER	13-03542	\$26.95
OH-6A OVAL BLCK 2" HITCH COVER	13-03543	\$26.95
REMOVE FOR RIVER HITCH COVER	13-03544	\$26.95
MOHAWK 2" HITCH COVER BLACK	13-03546	\$26.95

PS

T-3 2 INCH RECEIVER LOCK



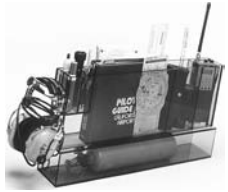
Receiver locks prevent your hitch cover, or step hitch from being stolen.

13-03529.....\$19.50

ORGANIZERS - POCKET TOOLS

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. Holds fire extinguisher, charts, books, transceiver, headsets, glasses, wallet, fuel strainer, flashlight, pens, highlighters, and more. Attractive and durable, the Cockpit Companion is built from top-grade smoked acrylic. Made in USA.



STYLE #172

Fits most Cessna 172's plus any other aircraft with this available space. Top portion dimensions: 22" Long (plus 4" headset

post) 8" Tall (12" total w/bottom), 3" Wide Bottom extinguisher dimension: 22" Long 4" Tall (12" total w/top), 4-1/4" Wide. Features removable pencil "divider" for easy cleaning. All are outside dimensions!

P/N 13-02710\$249.95



STYLE #182

Fits most 182's, 206's, 210's & other aircraft with this available space. Dimensions: 18" long plus (4" headset post) 12" Tall 4-1/4" Wide All are outside dimensions! Be sure to measure your available space prior to ordering!

P/N 13-02715\$239.00



MAP, CHECKLIST & LOG BOOK HOLDERS

Organize Your Cockpit with Ease! These holders come in three sizes to store your maps, checklists and log books. They are thermoformed from ABS plastic, and come in either black or gray.

Description	Size	Color	Part No.	Price
Map/Checklist	9"x10"x 5/8"	Black	13-03085	\$27.50
Aircraft Log	4-1/2"x7"x1/4"	Black	13-03086	\$15.80
Engine Log	6-1/2"x7"x1/2"	Black	13-03087	\$15.80
Map/Checklist	9"x10"x 5/8"	Gray	13-03088	\$27.50
Aircraft Log	4-1/2"x7"x1/4"	Gray	13-03089	\$15.80
Engine Log	6-1/2"x7"x1/2"	Gray	13-03090	\$15.80



UNCLE MIKE'S SEAT ORGANIZER

Designed to keep paperwork, clipboards, books, notepads, 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.....\$28.95

PLANE POCKETS



Plane Pockets for Planes with Headrest 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 are designed to hold your handheld radio, cameras, manuals, batteries, oxygen mask, and many other items. Top pockets will hold paper, sunglasses, pop, 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.

P/N 13-04160.....\$72.75
P/N 13-04161.....\$67.50

LEATHERMAN TOOLS

CHRUCH TOOL



Locking Pliers, Wire Cutters, Hard-Wire Cutters, Serrated Knife, Metal/Wood File, Ruler (Inch/Metric), Bottle Opener, Small Screwdriver, Medium Screwdriver, Large Screwdriver, Phillips Screwdriver (#1/#2), Hex Bit Driver, Wire Stripper, Lanyard Attachment
P/N 13-02727.....\$73.50

WAVE TOOL



Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Cutters, Clip-Point Knife, Serrated Knife, Saw, Scissors, Wood/Metal File, Diamond-Coated File, Large Bit Driver, Small Bit Driver, Large Screwdriver, Ruler (8 inch/19 cm), Bottle/Can Opener, Wire Stripper, Lanyard Attachment, Two Double-Ended Bits
P/N 13-03289.....\$69.85

BLAST



Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Cutters, Clip-Point Knife, Wood/Metal File Saw, Scissors, Large Screwdriver Small Screwdriver, Phillips Screwdriver Small Bit Driver, Ruler (8 inch/19 cm) Bottle/Can Opener, Wire Stripper Lanyard Attachment One Double-Ended Bit
P/N 13-03286.....\$49.85

FUSE



Needlenose Pliers, Regular Pliers Wire Cutters, Hard-Wire Cutters, Clip-Point Knife, Scissors, Large Screwdriver, Small Screwdriver, Phillips Screwdriver, Ruler (8 inch/19 cm), Bottle/Can Opener, Wire Stripper, Lanyard Attachment
P/N 13-03287.....\$39.85

TOOL ADAPTERS

1/2 Inch Hex Drive, 3 Locking Positions, Lanyard Hole Tool Adapters make your favorite Leatherman tool even more versatile by quickly converting it to a 1/2" hex drive. Standard Tool Adapter fits PST, PST II, Super Tool 200, Sideclip, Flair 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



KICK



Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Cutters, Clip-Point Knife, Large Screwdriver, Small Screwdriver, Phillips Screwdriver Ruler (8 inch/19 cm), Bottle/Can Opener, Wire Stripper, Lanyard Attachment
P/N 13-03288.....\$31.59

CHARGE XT



Titanium Handles, Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Cutters, Crimper, 154 CM Clip-Point Knife, Serrated Knife, Cutting Hook, Saw, Wood/Metal File, Diamond-Coated File, Two Large Bit Drivers, Small Bit Driver, Large Screwdriver, Ruler (8 inch/19 cm), Bottle/Can Opener, Wire Stripper, Fixed Lanyard Ring, Quick-Release Lanyard Ring, Removable Pocket Clip, Nine Double-Ended Bits
P/N 13-03290.....\$99.85

CHARGE TI



Titanium Handles, Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Cutters, 154 CM Clip-Point Knife, Serrated Knife, Saw, Scissors, Wood/Metal File, Diamond-Coated File, Large Bit Driver, Small Bit Driver, Large Screwdriver, Ruler (8 inch/19 cm), Bottle/Can Opener, Wire Stripper, Fixed Lanyard Ring, Quick-Release Lanyard Ring, Removable Pocket Clip, Eight Double-Ended Bits
P/N 13-03291.....\$99.85

CORE



Stainless Steel Body, All-Locking Blades, Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Cutters, Stranded - Wire Cutters, Electrical Crimper, Clip-Point Knife, Serrated Knife, Wood/Metal File, Saw, 5/16" Screwdriver, 7/32" Screwdriver, 1/8" Screwdriver, Phillips Screwdriver, Awl w/Thread Loop, Ruler (9 inches/22 cm), Bottle/Can Opener, Wire Stripper, Lanyard Ring
P/N 13-04045.....\$59.85



PST, PST II, Super Tool 200 and Wave.

PS

PILOT WATCHES

TORGOEN SWISS PILOT WATCHES



Torgoen was founded by a group of aviation enthusiasts to provide similar enthusiasts with watches of uncompromising quality. In the cockpit, things happen quickly... a pilot depends on reliable instruments with clear markings and indexes for rapid and precise readings. All of these same standards are part of another cluster of pilot's instruments: the Torgoen line of watches. Attainment of aviation standards comes as part of two major steps, Preparation and Production. At Torgoen, preparation includes precision engineering, careful attention to details of every component, and the best choice of materials. During and after production, Torgoen watches & components pass the most stringent quality control procedures. Experience the confidence that comes with using a fine instrument - a TORGOEN watch.

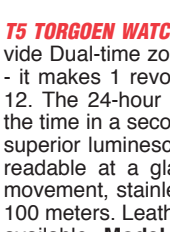


T2 TORGOEN WATCHES - T2 watches offer Flight Computer capacity with a moveable external, crenate ring. Capacity to perform E6B functions or even quickly perform currency conversions while shopping in a foreign country. Handsome. Comfortable. Available in dressy 2-tone finish. Swiss-made chronograph movement, stainless steel case. Water resistant to 50 meters. **Model shown:** Silver dial/black leather band. P/N 13-02489\$287.10

T3 TORGOEN WATCHES - T3 watches offer Flight Computer capacity combined with a refined, flat appearance. capacity to perform E6B functions, currency conversions and even calculate the tip at a restaurant. Swiss-made chronograph movement. Stainless steel case and band. water resistant to 100 meters. **Model shown:** Blue dial/stainless steel band. P/N 13-02493\$300.15



T4 TORGOEN WATCHES - T4 Zulu Time watches provide Dual-time zone function using an internal rotating bezel. Large numbers and superior luminescence 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:** White dial/brown leather band. P/N 13-02496\$147.90



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 luminescence 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\$147.90



ASK ABOUT OUR OTHER T2, T3, T4, & T5 WATCHES!

WORLD TIME CLOCK



The World Time Clock is like having 24 clocks in one. It has no hands. The 24 time zones are color coded for easy use. The map and pointers rotate clockwise. The pointers point to the stationary 24 hour outer time scale, giving you accurate time worldwide. Great for offices, class rooms, and anywhere current time around the world is useful.

P/N 13-31205\$27.50/ea.



VIBRALITE3 VIBRATION WATCH

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 you. 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 the ideal answer for those who need reminding of times to take medicine, scheduled daily activities and more.

With stainless steel bandP/N 13-02541\$65.50
With leather band.....P/N 13-02542\$54.50



GMT-3000



GMT-2001

AIRMAN PILOT WATCHES

The AIRMAN is the easiest watch to read time in 24:00 hours, in two time-zones. You do not have to reset the hands each time you fly into a different time-zone; set inside dial to GMT (Greenwich Mean Time) and use the rotating bezel for local time.

These watches are Swiss made with luminous dials and hands for night read-out. They are accurate to 1 minute a year and come with a 3 year battery and a 1 year 100% guarantee.

Because of the 24-hour dials, our watches can also be used as a Compass; point the hour hand in the direction of the sun and find North at 24:00.
GMT-3000.....P/N 13-02874\$397.95
GMT-2001.....P/N 13-02873\$495.00

ECO-DRIVE SKYHAWK



- Flight chronograph • 4yr power reserve • Charges in sunlight or indoors • Time & calendar - 22 time zones (30 cities) • 3 world time alarms • 1/100 sec. chronograph measures up to 24 hrs • 99 min. countdown timer • 1-touch interchangeable analog/digital times • Rotating slide rule bezel • Screw back case • Push-button safety clasp • Low charge indicator window • Time reset advisory • Power saver function • 100M water-resistant.

Stainless Steel bandP/N 13-01418\$239.95
Stainless/Polyurethane bandP/N 13-03586\$268.95
Titanium bandP/N 13-03587\$298.95

CITIZEN ECO-DRIVE WATCHES



Features: • Pilot's slide rule dial operated by crown at 8 o'clock position • Non-Reflective Crystal • Large luminous markers for easy readability • Dual Time

Black Leather "Crocodile" Band
P/N 13-03580\$176.95
Stainless Steel Band
P/N 13-03581\$235.95
Black Ion-Plated SS Band
P/N 13-03582.....\$268.95

AVIATORS 5-IN-1 FLIGHT TIMER



5-In-1 Flight Timer with LED Amp Alarm and Mount A 12 or 24 hour clock plus 4 Timers all in one package. Select individual timers to: 1. Count Up 2. Count Down 3. Program Memory, Time up to five events at the same time ETA's Waypoints Elapsed Time, Turns Tank Changes, Clock and all timers may be set independently and run consecutively. Count-down timer memory may be set independently and run consecutively.

5-IN-1 AVIATORS FLIGHT TIMER 13-00095.....\$43.50
5-IN-1 FLIGHT TIMER AUDIO VERS 13-00391.....\$67.50
5-IN-1 AVIATORS FLIGHT TIMER W/ MOUNT & LED COLOR
P/N13-04176Special Order, Call for Quote!

FLIGHT JACKETS

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 MA-1 reverses to high visibility Indian Orange for use in emergencies. Colors: Black, Navy, Sage Replica

Gray, Titanium, Stratos.

- BlackP/N 13-00544**\$89.95**
- Navy.....P/N 13-00546**\$89.95**
- Sage.....P/N 13-00547**\$89.95**
- Replica GrayP/N 13-00548**\$89.95**
- SilverP/N 13-00549**\$89.95**

LEATHER MA-1 FLIGHT JACKET

Premium cowhide leather winter-weight flying jacket styled as the classic MA-1. Quilted lining with polyester interlining. Snap closure front flap pockets and inside pocket. Antiquated brass zippers and snaps. Leather zip pull, embossed logo. Wool ribbed waistband, cuffs and collar. Colors: Black and Brown



- BlackP/N 13-00552**\$259.95**
- Brown.....P/N 13-00553**\$259.95**

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

- P/N 13-00554**\$379.95**

AIR FORCE WHITE SCARF W/USAF EMBLEM - POLY COPY OF OLD ISSUE AF SCARF P/N 13-03612.....**\$24.95**
G.I. OD WOOL SCARF ISSUE - 100% WOOL ISSUE 52" LONG WOVEN IN TUBE SHAPE. ISSUE FOR AMRY AND MARINES. P/N 13-03612.....**\$24.95**



EPAULETTES

We offer four different colors for the epauletts. The silver color on the epauletts are not glittery, but like brushed chrome and the gold color is non-glittery. Dimensions : 2" x 4 1/8" x 2 1/2"

COLOR	BAR	P/N	PRICE
Black/Gold	3 Bar	13-04136	\$13.50
Blue/Gold	3 Bar	13-04137	\$13.50
Black/Gold	4 Bar	13-04138	\$13.50
Blue/Gold	4 Bar	13-04139	\$13.50
Black/Silver	3 Bar	13-04140	\$13.50
Black/Silver	4 Bar	13-04141	\$13.50
Blue/Silver	4 Bar	13-04142	\$13.50

CWU - 45/P FLIGHT JACKET

A nylon version of the U.S. Air Force current issue flight jacket. 100% nylon flight satin outer shell. Fully lined with quilted flight nylon and polyester fill. Water repellent. Knit cuffs and wristband. Storm flap. Two fully-lined cargo pockets and combination utility pocket on sleeve. Removable Velcro logo patch. Colors:Black, Navy, Sage Replica Gray, Titanium, Stratos.



- BlackP/N 13-00559**\$89.95**
- Navy.....P/N 13-00569**\$89.95**
- Airforce GreenP/N 13-00572**\$89.95**
- Replica GrayP/N 13-00576**\$89.95**

LEATHER CWU-45/P FLIGHT JACKET



Premium cowhide leather winter-weight flying jacket styled as the classic U.S. Air Force 45/P. Quilted lining with polyester interlining. Velcro closure front flap cargo pockets and inside pocket with snap fastener. Antiquated brass front zipper. Leather zip pull. Wool ribbed waistband and cuffs. Colors: Black and Brown

- BlackP/N 13-00555**\$259.95**
- Brown.....P/N 13-00556**\$259.95**

R.A.F. MARK VIII GOGGLES



Classic open-cockpit styling is updated here with an adjustable nosebridge designed to fit even modern jet-type helmets. Has a softly-padded leather face pad, laminated safety-glass lenses set in a dark blue metal frame, and adjustable elastic headstrap. P/N 13-06310**\$99.95**

SPLIT-LENS TYPE – Mark 4 Silver Cross premium quality goggles offer exceptional visibility. Superb facial comfort is achieved by using leather from continental mountain sheep skins renowned for their softness and pliability. Made in England.



- Clear LensesP/N 13-06000**\$73.85**

REPLACEMENT LENSES Clear, set of 2.....**\$35.65**
 P/N 13-06100

Smoke, set of 2
 P/N 13-06200**\$39.90**

PS

FLIGHT JACKETS - FLYING GLOVES



THE NAVIGATOR

Vintage Cowhide Bomber In the 1990's Neil Cooper pioneered a collection of 'distressed' leather jackets that enjoyed enormous popularity under the brand name New Zealand Outback. The hides are soft and supple, and the vintage cowhide captures the spirit of adventure that reminds us of a bygone era in aviation. The fit is

true to size. Made in the U.S.A Side Entry Handwarmer Pockets,

Vertical Entry Pockets, Inside Wallet Pocket, Distressed Cowhide, 50% Cotton / 50% Poly Lining
Color: Brown

Size	Part No.	Price
XS	13-03341	\$298.95
SM	13-03341-1	\$298.95
M	13-03341-2	\$298.95
L	13-03341-3	\$298.95
XL	13-03341-4	\$298.95
2X	13-03341-5	\$298.95
3X	13-03341-6	\$298.95



THE PROWLER

Civilian G1 with Side Entry Pockets Since 1938, the type G-1 flight jacket has been associated with the most elite aviators.

The G-1 is made from genuine water repellent goatskin with official detail, action back, and inside map pocket.

Military spec zipper and fasteners ensure durability even with the most rugged kind

of wear. The collar is genuine mouton lambs wool. The lining is nylon oxford with wool rib knit cuffs and waistband. The fit is true to size. Water

Repellent Goatskin, 100% Wool Knit Cuffs/Bottom, Genuine Mouton Top Collar, Side Entry Pocket, Inside Wallet Pocket, 100% Polyester Lining, Color: Brown

Size	Part No.	Price
XS	13-03342	\$295.95
SM	13-03342-1	\$295.95
M	13-03342-2	\$295.95
L	13-03342-3	\$295.95
XL	13-03342-4	\$295.95
2X	13-03342-5	\$295.95
3X	13-03342-6	\$295.95



THE WILDCAT

All Cotton Water Repellent Aviator Jacket Neil Cooper USA has recreated this enduring piece of flight gear that symbolizes the combat pilot's heroic role in U.S. military history. The 'Wildcat Aviator's jacket has been crafted in cotton fabric designed to repel water and wind. It's rugged and versatile enough for multi-season,

everyday use. It features a leather top collar and leather trimmed epaulets, side entry pockets, roomy patch pockets with a pencil pocket, cloth adjustable cuffs, elasticized waistband, and inside wallet and cell phone pockets. Available in Desert Tan, Black and Olive Washable Leather Top Collar and Leather-Trimmed Epaulets Elastic Cuffs w/Adjustable Strap, 100% Cotton Sewn-Lining, Side Entry

Handwarmer Pockets, Vertical Entry Pockets, Inside Wallet Pocket w/Zipper, Closure and one Without Zipper, Cell Phone Pocket
Colors: Black, Desert Tan, Olive

Size	Part No.	Price
XS	13-03346	\$86.25
S	13-03346-1	\$86.25
M	13-03346-2	\$86.25
L	13-03346-3	\$86.25
XL	13-03346-4	\$86.25
2XL	13-03346-5	\$86.25
3X L	13-03346-6	\$86.25
4X L	13-03346-7	\$86.25
5X L	13-03346-8	\$86.25



THE TOMAHAWK

A2 Flight Jacket Due to popular demand the A-2 design has evolved to be suitable for 21st Century pilots and civilians. In addition to snap-close patch pockets, the Tomahawk features practical side entry hand warmer pockets, plus an inside pocket. The Tomahawk advances the design while

remaining true to the original. The fit is true to size. Made in the USA.

Size	Part No.	Price
XS	13-03345	\$233.95
SM	13-03345-1	\$233.95
M	13-03345-2	\$233.95
L	13-03345-3	\$233.95
XL	13-03345-4	\$233.95
2XL	13-03345-5	\$233.95
3XL	13-03345-6	\$233.95
4XL	13-03345-7	\$233.95
5XL	13-03345-8	\$233.95

Water Repellent, Goatskin, Knit Cuffs and Waistband
50% Cotton / 50% Poly Lining, Side Entry Handwarmer Pockets
Vertical Entry Pockets Inside Wallet Pocket
Color: Brown



THE ZERO GRAVITY

All Leather A2 with Zip Out Liner The all-leather 'Zero Gravity' bomber jacket is manufactured to have a well-dressed appearance. It has been crafted in premium leather to withstand diverse climatic conditions. Yet, it's versatile enough for multi-season, everyday use. Lightweight and supple leather incorporates a removable Thinsulate

liner to provide warmth and wind resistance. Distinctive details include snap down collar, side entry pocket and patch pockets, leather cuff and waistband, removable liner, inside pockets and a bi-swing back for freedom of movement. The fit is true to size. Made in the USA.

Size	Part No.	Price
XS	13-03343	\$261.95
S	13-03343-1	\$261.95
M	13-03343-2	\$261.95
L	13-03343-3	\$261.95
XL	13-03343-4	\$261.95
2XL	13-03343-5	\$261.95
3XL	13-03343-6	\$261.95

Water Repellent Goatskin, 100% Nylon Sewn-Lining, All Leather Cuffs and Bottom, Side Entry Handwarmer Pockets, Vertical Entry Pockets, Inside Wallet Pocket, Removable Thinsulate Liner,

NOMEX AVIATOR'S SUMMER FLYING GLOVES

Size	P/N	Price
8	13-02055	\$26.85
10	13-02057	\$26.85
9	13-02056	\$26.85
11	13-02058	\$26.85
Black		
Size	P/N	Price
7	13-03615	\$26.85
8	13-03616	\$26.85
9	13-03617	\$26.85
10	13-03618	\$26.85
11	13-03619	\$26.85
12	13-03620	\$26.85

Desert Tan		
Size	P/N	Price
7	13-03621	\$26.85
8	13-03622	\$26.85
9	13-03623	\$26.85
10	13-03624	\$26.85
11	13-03625	\$26.85
12	13-03626	\$26.85

Olive Drab		
Size	P/N	Price
7	13-03627	\$26.85
8	13-03628	\$26.85
9	13-03629	\$26.85
10	13-03630	\$26.85
11	13-03631	\$26.85
12	13-03632	\$26.85

G.I. NYLON HELMET BAG

The G.I. nylon Helmet Bag is used by all flyers in od or black, NSN #8415-00-782-2989. Two exterior pouches with velcro closure. Zippered main compartment. cushioned handles. size 19" x 16", wgt 0.8 #

O.D. P/N 13-03613\$28.20
Black: P/N 13-03614\$28.20

NYLON FLYER KIT BAG

Carries almost as much as a duffel 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.....\$24.95



SPORTSPLANES APPAREL - SUNGLASSES

SPORTSPLANES APPAREL



Jackets:

- Teklon nylon shell/ water repellent
- Lightweight Fleece Lining
- Elastic waistband, elastic cuffs w/Velcro
- Adjustable Strap
- Nylon Lined Sleeves
- Lower slash pockets & one interior
- Pocket with Zip Closures

T-Shirts:

- Hanes Heavyweight 50/50
- Tapered Neck
- Double Needle Sleeve & Bottom Hem

Ponchos:

- Navy • Drawstring on Hood
- 4.5 Mil Vinyl • 50"H x 80"W

Polo Shirts:

- Hanes 5.6oz spun cotton poly
- Welt Collar
- Rib Knit Cuffs with Spandex
- Wood Tone Buttons
- Double Needle Bottom Hem

Caps:

- 2 Tone Brushed Twill Cap
- Low Profile/structured Fit
- 100% Cotton, 6 Panel
- Self Fabric/Velcro Closure
- Stitched Eyelets
- Fashion Curved Bill

Description	Part No.	Price
Sportspplanes Poncho	13-03308	\$15.95
Sportspplanes Jacket (S)	13-03309	\$59.95
Sportspplanes Jacket (M)	13-03310	\$59.95
Sportspplanes Jacket (L)	13-03311	\$59.95
Sportspplanes Jacket (X-L)	13-03312	\$59.95
Sportspplanes Jacket (2X-L)	13-03313	\$59.95
Sportspplanes T-Shirt (S)	13-03314	\$15.95
Sportspplanes T-Shirt (M)	13-03315	\$15.95
Sportspplanes T-Shirt (L)	13-03316	\$15.95
Sportspplanes T-Shirt (X-L)	13-03317	\$15.95
Sportspplanes T-Shirt (2X-L)	13-03318	\$15.95
Sportspplanes Polo Shirt (S)	13-03319	\$25.95
Sportspplanes Polo Shirt (M)	13-03320	\$25.95
Sportspplanes Polo Shirt (L)	13-03321	\$25.95
Sportspplanes Polo Shirt (X-L)	13-03322	\$25.95
Sportspplanes Polo Shirt (2X-L)	13-03323	\$25.95
Sportspplanes Cap (2X-L)	13-03324	\$15.95

COLOREYES HIGH PERFORMANCE SUNGLASSES



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 tri-stimulus 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.

Patented HDL-3C™ Technology: Through tri-stimulus color contrast techniques; this scientifically advanced lens improves the eye's capability to discriminate colors while emphasizing the chromatic differences in the visible spectrum and providing 100% UV protection (UV 400). HDL-3C™ stand for: HIGH DEFINITION LENS improving COLOR, CLARITY, COMFORT: Improved Color: The HDL-3C™ lens has a filter built directly into it which equalizes the colors in the color spectrum increasing the eye's receptors response time producing improved color sensitivity and contrast apprehension. Improved Clarity: The HDL-3C™ lens is a decentered lens that has been scientifically designed to increase visibility and eliminate distortion. The HDL-3C™ lens costs 5 to 15 times more to produce than other high end polycarbonate lens on the market due to the science built directly into our lens and the highest quality materials used in Italy to produce the finest optics available. Improved Comfort: The HDL-3C™ lens technology achieves these dynamic results without stressing the physiological vision system. They can be worn all day long without any eye strain. Extremely Lightweight: COLOREYES™ beta titanium sunglasses only weigh an incredible 12 grams!!! You cannot tell you have them on your face. This is the ultimate frame design for headset comfort. Scratch Resistant Coating: The best coating applied to protect the lenses from scratching. Please use the free micro-fiber sleeve provided with all our glasses to clean lenses so not to rub off coatings with abrasive cloth. **Free Hard Case:** A hard case for your new, technologically advanced sunglasses is provided to protect your investment for your eyes! **Free Micro-Fiber Sleeve:** This sleeve is not only additional protection for your investment but acts as the best cloth for cleaning your COLOREYES™ sunglasses. Please only use the free micro-fiber cloths to clean your new investment your eyes. The Best Sun Protection: All of these sunglasses provide 100% UV protection up to 440 nanometers. They are blue light and infrared effective and exceed all American, Australian, and European optical standards (including traffic light standard).

FRAME STYLES



ARGENTO
Ultra Light Aviator



ROSSO
Small Square



AZZURRO
Fashion Rectangle



TITANIO
Hinged Square



VERDE
Large Oval



Description	Part No.	Price
ROSSO ULTRA LITE FRAMES SMOKE	13-04022	\$199.00
ROSSO ULTRA LITE BETA FRAMES R	13-04023	\$199.00
TITANIO ULTRA LITE FRAMES S	13-04024	\$199.00
TITANIO ULTRA LITE FRAMES ROSE	13-04025	\$199.00
AZZURRO ULTRA LITE FRAMES SMOK	13-04026	\$199.00
AZZURRO ULTRA LITE FRAMES ROSE	13-04027	\$199.00
ARGENTO ULTRA LITE FRAMES ROSE	13-04028	\$199.00
ARGENTO ULTRA LITE FRAMES SMOK	13-04029	\$199.00
VERDE ULTRA LITE FRAMES SMOKE	13-04030	\$199.00
VERDE ULTRA LITE FRAMES ROSE	13-04031	\$199.00

PS

AIRCRAFT SPRUCE WEST
CORONA, CA • (877) 4-SPRUCE

648
Prices Subject to Change Without Notice

AIRCRAFT SPRUCE EAST
PEACHTREE CITY, GA • (877) 477-7823

SUNGLASSES



Randolph Engineering has been a leading supplier of military sunglasses to the U.S. Armed Forces since 1982. These sunglasses are the choice of America's Top Gun pilots and NASA astronauts. They meet demanding U.S. military specifications, provide superior glare protection and UV absorption and can be converted to prescription lenses. All of the sunglasses below feature 23K gold plated, hand polished frames and come with a crush resistant case.

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.



Size	Lens	Part No.	Price
52mm	Gray	13-00679	\$60.35
55mm	Gray	13-00681	\$60.35
55mm	Tan	13-00682	\$60.35
55mm	Gray/Green	13-00683	\$60.35
58mm	Gray	13-00684	\$60.35
58mm	Tan	13-00685	\$60.35

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 sunglasses style with lenses that are convertible for prescription lenses.



Size	Lens	Part No.	Price
57mm	Gray	13-00687	\$60.35
57mm	Tan	13-00688	\$60.35
57mm	Gray/Green	13-00689	\$60.35
61mm	Gray	13-00690	\$60.35
61mm	Gray/Green	13-00691	\$60.35



CREW CHIEF - An updated version of traditional Randolph sunglasses. Crew Chief sunglasses has all the features of the American Pilot above in a slightly more tear drop shape lens design. Excellent for flying & driving.
54mm-Gray/Green....P/N13-00698 ..\$68.85

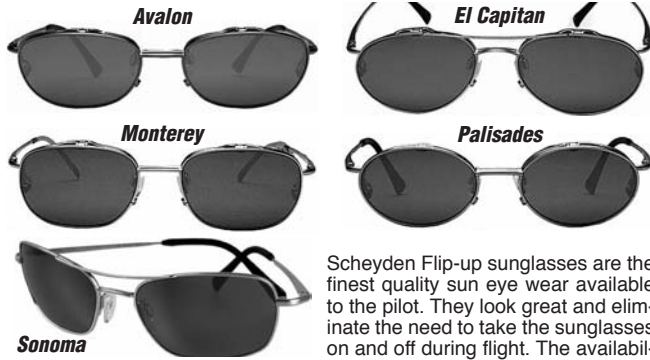
Polar Eyes Premium Polarized Sunwear

PolarEyes® Sport Collection - Whether on the water or off, PolarEyes sport sunwear provides Advanced UV Protection™. The patented designs utilize flexible hypoallergenic nylon Weightless 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 unsur-

passed fit that is both comfortable and secure. Developed from 25 years of polarized sunglass manufacturing experience, PolarEyes offer protection like no other sunglass. The 2004 sport collection features many design enhancements including Flex2Fit™ adjustable temples, thermal ports that eliminate moisture build up on the lens surface and an increased range of lens shapes and frame styles. **CASE AND CLOTH** - All PolarEyes® sunglasses include a case and a large micro-fiber lens cloth. **PolarPC® Lens System** - All PolarEyes frames feature polarized UV400 PolarPC lenses that completely protect the eyes from damaging UV light and eliminate harsh surface glare that can be both distracting and cause unnecessary eye strain. PolarPC lenses are made from impact-resistant polycarbonate with a bonded hard-coat to resist scratching. The result is an extremely durable, distortion-free lens that delivers superior optics and maximum performance both on the water and off. Lenses are available in gray or copper tints.

Frame Model	Frame Size	Frame Color	Lens Color			Part #	Price Each
			Copper	Gray	Both		
ISLAY	Small	Black		Yes		13-03179	\$49.95
ISLAY	Small	Russet			Yes	13-03180	\$49.95
ISLAY	Small	Silver				13-03181	\$49.95
ISLAY	Large	Black	Yes			13-03182	\$49.95
ISLAY	Large	Russet	Yes			13-03183	\$49.95
ISLAY	Large	Blk Silver			Yes	13-03184	\$49.95
PISMO	Small	Black			Yes	13-03185	\$49.95
PISMO	Small	Tortoise	Yes			13-03186	\$49.95
PISMO	Large	Black	Yes	Yes		13-03187	\$49.95
PISMO	Large	Tortoise	Yes	Yes		13-03188	\$49.95
OBISPO	Small	Black			Yes	13-03189	\$49.95
OBISPO	Small	Tortoise			Yes	13-03190	\$49.95
OBISPO	Small	Russet			Yes	13-03191	\$49.95
OBISPO	Large	Black			Yes	13-03192	\$49.95
OBISPO	Large	Tortoise			Yes	13-03193	\$49.95
OBISPO	Large	Russet			Yes	13-03194	\$49.95

SCHEYDEN FLIP-UP SUNGLASSES



Scheyden Flip-up sunglasses are the finest quality sun eye wear available to the pilot. They look great and eliminate the need to take the sunglasses on and off during flight. The availability to flip the lenses up and down allows the wearer to adjust their eyes to the varying light levels. Instrument pilots who fly in and out of the clouds, or VFR pilots, who are constantly shifting their views from the light levels inside the cockpit to outside the cockpit can appreciate the ability to quickly adjust their sunglasses without having to squeeze the frames under their headsets while removing and replacing the entire frame. The frames are made of titanium and the lenses are crystal. The lenses have several coatings, which include three anti reflective coatings, a hydrophobic coating on the front and back side and a flash mirror coating. The frames are available in 5 different styles and feature high contrast bronze lenses which we have found to be ideal for pilots. The frames are available in Gun Metal, Titanium, & Gold finishes. All glasses come in a rosewood case with a microfiber cleaning cloth & carrying bag. Lifetime guarantee.

Scheyden Style	Frame Color	Part #	Price Each
Avalon	Gun Metal	13-01523	\$299.00
Avalon	Titanium	13-01524	\$299.00
Avalon	Gold	13-01571	\$299.00
Palisades	Gun Metal	13-01543	\$299.00
Palisades	Titanium	13-01554	\$299.00
Palisades	Gold	13-01555	\$299.00
El Capitan	Titanium	13-01574	\$299.00
Sonoma	Gun Metal	13-01521	\$299.00
Sonoma	Titanium	13-01558	\$299.00
Sonoma	Gold	13-01522	\$299.00
Monterey	Gun Metal	13-01537	\$299.00
Monterey	Titanium	13-01518	\$299.00
Monterey	Gold	13-01541	\$299.00

SCHEYDEN fixed gear sunglasses (non flip up) available in the same styles at \$199.00 ea. Call for part numbers.

SCHEYDEN DUAL RX FLIP-UPS



The design was set in motion after several requests from pilots in need of just such a product. Even with laser corrected vision over a million people a year, approx. 1/2 the US population still require corrective lenses. The glasses

should be considered a pair of prescription sunglasses with the ability to adjust for low light conditions in a wink of an eye. Magnets are used to hold the tinted lenses down in place until the magnetic bond is broken by light forward pressure with your thumb. Up go your tinted lenses and your clear corrected lenses remain. For busy activities such as piloting an aircraft removing clip-ons and replacing them can add to an already heavy workload. With the Scheyden Dual RX Flip-Up your tinted lenses are permanently attached and ready when the glare becomes too much to handle.


El CapitanP/N 13-01574-1 ..\$345.00
 SonomaP/N 13-01558-1 ..\$345.00
 AvalonP/N 13-01524-1 ..\$394.95




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
5222-Lrg AviatorP/N 2121**\$89.75**



MEDIUM AVIATOR
Base Curve: 6
Temple Length: 140mm/Spring Hinges
Lens Size: 59.3 x 51.57 x 67.02mm, Dbl 12.5mm; Matte Black
6783-Medium AviatorP/N 13-03136**\$89.95**



MEDIUM AVIATOR
Base Curve: 6
Temple Length: 140mm/Spring Hinges
Lens Size: 59.3 x 51.57 x 67.02mm, Dbl 12.5mm
GunmetalGG6785-Medium Aviator
P/N 13-03138**\$89.95**



VELOCITY TITANIUM
Base Curve: 8
Temple Length: 130mm/Spring Hinges
Lens Size: 60 x 39 x 62mm, Dbl 16mm
Gunmetal
6692-Velocity Titanium
P/N 13-03139**\$109.95**



LASSEN TITANIUM
Base Curve: 8
Temple Length: 130mm/Spring Hinges
Lens Size: 62 x 60.9 x 32.2mm, Dbl 19mm;Henna
6698-Lassen TitaniumP/N 13-03140**\$109.95**



PRATO
Base Curve: 8
Temple Length: 135mm/Spring Hinges
Lens Size: 54.0 x 32.3 x 54.0mm, Dbl 16.6mm; Henna
6788-PratoP/N 13-03141**\$109.95**



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 denier cordura exterior, soft padded durable lining. Black color.
P/N 13-00699**\$12.95**


COCOONS SUNGLASSES

Cocoons were designed to fit over glasses; however our smaller styles make them extremely popular as solo sunglasses. Cocoons feature PolarTx® 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.

Sizing Guide: Measure the width (w) and height (h) of your prescription eyewear to determine which Cocoons sunglasses will fit best.



SLIMLINE (MEDIUM)
RX frame sizes: up to 5-3/8" w X 1-5/8" h
P/N 13-02967**\$39.95**



PILOT (LARGE)
RX frame sizes: up to 5-3/8" w X 1-5/8" h
P/N 13-02968**\$39.95**



AVIATOR (EXTRA LARGE)
RX frame sizes: up to 5-3/8" w X 1-5/8" h
P/N 13-02969**\$39.95**

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



52MMP/N 13-03212**\$41.95**
54MMP/N 13-03213**\$41.95**

GENERAL



52MMP/N 13-03214**\$61.75**
58MMP/N 13-03215**\$61.75**

PILOT



50MMP/N 13-03219**\$76.75**
52MMP/N 13-03220**\$76.75**

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 inexpensive corrected sunglasses. Available from 1.25 to 3.0 diopters in .25 diopter increments. Please specify magnification at time of order.

Description	P/N	Price	Description	P/N	Price
Optx 20/20 1.25	13-06301	\$19.95	Optx 20/20 2.00	13-06304	\$19.95
Optx 20/20 1.50	13-06302	\$12.95	Optx 20/20 2.50	13-06306	\$19.95
Optx 20/20 1.75	13-06303	\$13.30	Optx 20/20 3.00	13-06308	\$19.95

PS

TRINITEC GIFTS

TRINITEC 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).

- Altimeter Wall ClockP/N 9255\$27.50
- Directional Gyro Wall ClockP/N 13-00529\$27.50
- Artificial Horizon Wall ClockP/N 13-00531\$22.95
- VOR Wall ClockP/N 13-09064\$27.50
- Airspeed Indicator ThermometerP/N 13-32130\$27.50
- Altimeter/Airspeed ThermometerP/N 13-02198\$54.50

TRINITEC 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 ClockP/N 13-09070\$25.95
- Directional Gyro Desk Alarm ClockP/N 13-09075\$25.95
- Horizon Desk Model Alarm ClockP/N 13-09085\$25.95
- VOR Desk Model Alarm ClockP/N 13-09080\$25.95

TRINITEC EFIS DESK ALARM CLOCKS



EFIS HSI
13-02097
\$17.95

TRINITEC 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
\$29.95



Directional Gyro
P/N 13-02092
\$29.95



VOR
P/N 13-02094
\$29.95



Horizon
P/N 13-02093
\$29.95



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
\$27.50



Dual Time 12/24 White
P/N 13-02099
\$27.50



Dual Time 12/24 Wht Inner
P/N 13-02101
\$27.50



Dual Time 12/24 Black Inner
P/N 13-02102
\$29.95

TRINITEC AVIATOR KEY CHAINS

Plastic frame: 1.5" x 1.5"



Altimeter
P/N 13-02103
\$4.50



Airspeed
P/N 13-02104
\$4.50



Directional Gyro
P/N 13-02105
\$4.50



VOR
P/N 13-02107
\$4.50



HSI
P/N 13-02108
\$4.50



HSI
P/N 13-02109
\$4.50



Horizon
P/N 13-02106
\$4.50



Horizon
P/N 13-02111
\$4.50

TRINITEC AVIATOR FRIDGE MAGNETS



Altimeter
13-02112
\$3.60



Airspeed
13-02113
\$3.60



Dir. Gyro
13-02114
\$3.60



Horizon
13-02115
\$3.60



VOR
13-02116
\$3.60



HSI
13-02117
\$3.60

PS

TRINTEC AVIATION GIFTS

100th ANNIVERSARY OF FLIGHT COLLECTION

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).



P/N 13-02143
\$17.95



P/N 13-02144
\$17.95



P/N 13-02145
\$17.95



P/N 13-02146
\$17.95



P/N 13-02147
\$19.95



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\$12.95



P/N 13-02149



P/N 13-02151

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\$11.80

P/N 13-02151\$9.95

TRINTEC AIRCRAFT WALL CLOCKS



10" diameter wall clock Popular aircraft designs by Labusch Skywear Designs. Quartz Clock Movement. Requires one AA size battery. **ALL CLOCKS**\$22.70

FW190 Focke-Wulf/BF109 Messer. P/N 13-02152

VulcanP/N 13-02154

F-16 ThunderbirdP/N 13-02155

F-117 StealthP/N 13-02156

HalifaxP/N 13-02158

deHavilland BeaverP/N 13-02159

F-4 PhantomP/N 13-02160

F4U CorsairP/N 13-02161

CF-18 Hornet.....P/N 13-02162

N.Amer. HavardP/N 13-02163

F-16 FalconP/N 13-02164

BF109 Messerschmitt P/N 13-02165

B-17 Flying Fortress ..P/N 13-02166

A-10 Thunderbolt.....P/N 13-02167

J-3 Piper ClubP/N 13-02168

Lancaster.....P/N 13-02153

P-51 MustangP/N 13-02169

SR71 BlackbirdP/N 13-02157

Douglas DC-3P/N 13-02170

F-14 TomcatP/N 13-02171

F6F HellcatP/N 13-02172

CF105 ArrowP/N 13-02173

P-40 WarhawkP/N 13-02174

P-38 LightningP/N 13-02175

MosquitoP/N 13-02176

Corsair.....P/N 13-02177

Blue AngelsP/N 13-02178

Strike EagleP/N 13-02179

SpitfireP/N 13-02180

TRINTEC COASTER SETS



P/N 13-02133
\$12.95



P/N 13-02134
\$12.95



P/N 13-02137
\$11.95

TRINTEC MOUSE PADS



P/N 13-02127
\$9.95



P/N 13-02129
\$9.95



P/N 13-02131
\$9.95



P/N 13-02132
\$9.95



P/N 13-02128
\$9.95



P/N 13-02130
\$9.95

TRINTEC T-SHIRTS

100% Cotton. Heavyweight. Complete part no. with: -1 (small), -2 (med.), -3 (large), -4 (XL), or -5 (XXL) for t-shirt size.



White ..P/N 13-02182.....\$17.95
Black....P/N 13-02183.....\$17.95



WhiteP/N 13-02184\$17.95
BlackP/N 13-02185\$17.95



White ..P/N 13-02186.....\$17.95
Black....P/N 13-02187.....\$17.95



WhiteP/N 13-02190\$17.95
BlackP/N 13-02191\$17.95

PS

WARBIRD WALL CLOCKS & COASTERS

WARBIRD WALL CLOCKS

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.) ALL CLOCKS\$29.95



PT-17 Kaydet
P/N 13-02576



B-17 Flying Fortress
P/N 13-02577



P-51 Mustang
P/N 13-02578



C-47 Skytrain
P/N 13-02579



F-4 Phantom
P/N 13-02580



AH-64 Apache
P/N 13-02581



FA-18 Hornet
P/N 13-02582



307 Stratoliner
P/N 13-02583



707 Jetliner
P/N 13-02584



747 Jetliner
P/N 13-02585



DC-10 Jetliner
P/N 13-02586



777 Jetliner
P/N 13-02587



P-38 Lightning
P/N 13-02590



Beautiful View
P/N 13-02591



PBY Catalina
P/N 13-02592



Memphis Belle
P/N 13-02593



Flying Fortress
P/N 13-02595



P-40 Warhawk
P/N 13-02596



Ready To Ride
P/N 13-02597



Bombs Away Baby
P/N 13-02598



B-29 Bomber
P/N 13-02599



Eye Candy
P/N 13-02601



Come Home Soon
P/N 13-02602



P-38 Gold
P/N 13-02604



Wings for Victory
P/N 13-02605



F-14 Tomcat
P/N 13-02606



P-51 8th
P/N 13-02607



F4U Corsair
P/N 13-02608



B-24 Liberator
P/N 13-02609



P-38 Lightning
P/N 13-02611



Uncle Sam
P/N 13-02612



Rosie the Riveter
P/N 13-02613



Semper Fidelis
P/N 13-02614



Stearman
P/N 13-02615



Black Widow
P/N 13-02618



B-17 Flying
P/N 13-02619



B-25 Mitchell
P/N 13-02621



B-29 Super Fortress
P/N 13-02622



C-47 Skytrain
P/N 13-02623



P-51 Mustang
P/N 13-02624



SBD Dauntless
P/N 13-02626



SNJ-5
P/N 13-02627



F-86 Sabre Jet
P/N 13-02628



U.S. Army
P/N 13-02631



U.S. Navy
P/N 13-02632



U.S. Air Force
P/N 13-02633



U.S. Marines
P/N 13-02634



Spitfire MK
P/N 13-02636



Mosquito MK II
P/N 13-02638



Junkers Ju 88A-4
P/N 13-02641



Me 262A-2a
P/N 13-02642



Me 109
P/N 13-02643



Ju87B-2 Stuka
P/N 13-02644



Zero A6M
P/N 13-02646



Fokker Dr1
P/N 13-02647



Bristol F2B
P/N 13-02639

AIRCRAFT SPRUCE WEST
CORONA, CA • (877) 4-SPRUCE

653
Prices Subject to Change Without Notice

AIRCRAFT SPRUCE EAST
PEACHTREE CITY, GA • (877) 477-7823



FUEL GAUGES - BIRD DETERENTS

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 uncalibrated for custom calibration to home built tanks. These Indicators allow an accurate check of on board fuel level indicators and eliminate the guess work.

All Models\$12.70

P/N	APPLICATION	P/N	APPLICATION
12-21200	C-150-2 (13 gal.)	12-21230	C-182 (42 gal.)
12-21205	C-150 Long (19)	12-21240	C-210 (45 gal.)
12-21210	C-170-2 (20 gal.)	12-21245	PA-24 (30 gal.)
12-21215	C-172 (34 gal.)	12-21250	7KCAB
12-21225	C-182 (30 gal.)	12-21255	PA-28
		12-21260	Homebuilt (Uncalibrated)

FUEL HAWK FUEL GAUGES

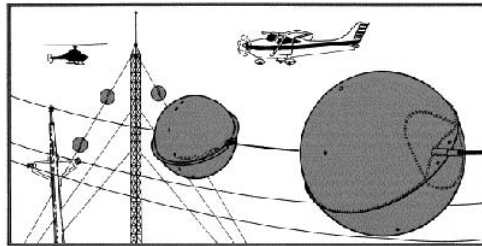
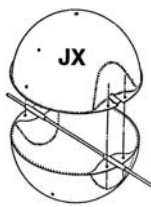


The Fuelhawk is just 11" long, clear lightweight and unbreakable. It's easy to use and gives an instant readout in gallons usable. No more guessing. These handy devices offer the answers to these very important questions:

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?

Part No.	Application	Price
13-00443	Cessna 152 (standard 13 gal. tanks)	\$23.95
13-00442	Cessna 172 (standard 21 gal. tanks)	\$23.95
13-01468	New Cessna 172 Skyhawk (26.5 gal.)	\$23.95
13-01469	New Cessna 182 Skylane (43.5 gal.)	\$23.95
13-00441	Cessna 182LR (42 gal. Long range tanks)	\$23.95
13-00439	Universal for any aircraft, w/graph & calibration chart	\$23.95
13-00949	Universal XL Fuel Gauge (16" long)	\$23.95

TANA 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, oscillate, or cause electrolysis or vibration. Stocked in 9", 12", and 24" sizes. Larger sizes available on request. Color: international orange. Stocked in Tana marker style JX.

- 12" diameter with TapeP/N 13-00057\$83.95
- 20" diameter with TapeP/N 13-00058\$139.95
- 24" diameter with TapeP/N 13-00059\$199.50
- 12" diameter w/o TapeP/N 13-00054\$73.00
- 20" diameter w/o TapeP/N 13-00055\$103.95
- 24" diameter w/o TapeP/N 13-00056\$183.95

REPLICA PROPELLER LETTER



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.....P/N 9925.....\$29.95



HOLD SHORT AVIATION TRIVIA BOARD GAME

Clearance begins by correctly answering a question. The questions cover all aspects of aviation knowledge and are categorized into 3 levels, private, commercial and ATP, making it fun for pilots at all levels. Throughout the game, the

players navigate along the chart on the board, a VFR sectional or IFR enroute chart. In addition to answering the questions, the players may have to explain symbols on the chart board or follow ATC instructions based on the airspeed that they are in. To make it even more interesting, thunderstorms that must be circumnavigated are placed along route. Hold Short is a fun way to stay current.

P/N 13-02036\$32.95

DELTA AIR LINES BOEING 777 JIGSAW PUZZLE

The Delta Air Lines Boeing 777 Jigsaw Puzzle use textured linen paper. There are 513 pieces (bagged) and it measures 21.25" X 15" assembled. The shrink-wrapped puzzle box size is approximately 9.5" X 7.5" X 2.4". This puzzle is great for all ages including: airline enthusiast, airline employees, and jigsaw puzzle lovers to name a few! These jigsaw puzzles are of 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.....\$19.95



FOLDING AIRSHOW SEAT

This lightweight, compact, folding seat is excellent for senior citizens and everyone who needs portable seating for airshows, camping, fishing, hiking, concerts, picnics, golf, parades, etc. Features a water resistant seat and carrying strap for shoulder or belt. Folds to 2-1/2" x 23" and holds up to 250 lbs.

P/N 13-17950\$10.95

ARROWPROP DECORATOR PROP CLOCKS

Choose from:
Quartz Clock (Q)
Weather Station (W)



Quartz Clock



Weather Station

Weather station contains a thermometer, hygrometer, & barometer in 1 instrument.

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.

ITEM	P/N	PRICE	ITEM	P/N	PRICE
52" Prop w/Q..	13-32170-Q	..\$188.95	65" Prop w/Q ..	13-32171-Q	..\$310.95
52" Prop w/W	13-32170-W	..\$209.95	65" Prop w/W..	13-32171-W	..\$330.95

AIRCRAFT PROPELLER



Beautiful reproduction of an early day aircraft propeller like those used on the Piper Cub, Aeronca, Taylorcraft and others. Constructed of laminated hardwood with clear finish, red tips and simulated brass tipping on the propeller blades.

52" Prop w/Q..	13-32175-Q	..\$240.95	65" Prop w/Q	13-32176-Q\$349.95
52" Prop w/W	13-32175-W	..\$330.95	65" Prop w/W	13-32176-W\$370.95

LINDBERG PROPELLER



This 50"propeller is a scaled reproduction of the propeller used by Colonel Lindberg on his spad airplane. Available in clear(C) or stained (S) finish.

50" Prop w/Q	13-32180-CQ	..\$189.95	50" Prop w/Q	13-32180-SQ	..\$199.95
50" Prop w/W	13-32180-CW	..\$187.95	50" Prop w/W	13-32180-SW	..\$219.95

PS

PEDAL PLANES - SCOOTERS

R V SPORT – PEDAL PLANE KIT



The RV-Sport is a miniature home-built airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. It was engineered with the builder and the youngster in mind. The simple construction will exercise your skills in basic woodworking, sheet metal, fitting and gluing plastic, finish painting, and detailing. Your completed RV-Sport will be a rugged, realistic toy that is sure to be a hit with every kid on the block. The RV-Sport is built using basic shop tools, and is the ideal "mini-homebuilt" for homebuilders and pilots of all ages! Purchase just the plan set with assembly manual and information updates or the complete kit which includes these items plus hardware, plastic items, & finish decal set.

Complete Plans Set.....P/N 13-30715\$23.50

F4U-1 CORSAIR JR. PEDAL PLANE KIT FOR KIDS



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 simple construction will exercise your skills in basic woodworking, sheet metal, fitting & gluing plastic, finish painting, & detailing. The F4U-1 Corsair Jr. is available in following kits:

- Plans and Patterns onlyP/N 13-30730\$21.95
- Plastic Kit onlyP/N 13-30735 ..\$309.00
- Hardware, landing gear, steering, folding with hinges, fasteners
P/N 13-30740 ..\$284.00
- Complete Construction Kit.....P/N 13-30745 ..\$875.00

Note: The plastic Kit Only is highly recommended when you order the plans due to the great amount of detail required to achieve the real F4U look. The plane can be built without the Plastic Kit but it will take longer.

Wooden Model Bi-Plane



Designed to be assembled from kit in 2 to 3 hours including painting and decorating the plane the color and design of your choice. All airplane wood components are 3/8" imported Baltic Birch plywood, the rocker is double thick fl" plywood to eliminate marks and dents on the floor. All wood parts are cut on our CNC computer router. This manufacturing method insures a super and accurate fit and finish. All holes for fasteners are pre-drilled and aligned for quick assembly. Axle, handlebar, and tail wheel mounting brackets are 6061 aluminum, pre bent and drilled. All wood edges are factory rounded to eliminate splinters and save assembly time. Use it as a Rocker for young pilots and by removing 6 screws (under 5 minutes) convert the plane into an exciting roll around scooter plane for pilots with thoughts of doing "Loop-de-Loops" on the patio. Sturdy construction will insure years of fun and great memories for the builder and pilot alike.

P/N 13-03298 ..\$159.95

GO-PED LIGHTWEIGHT MOTORIZED SCOOTER



The patented Go-Ped design combines a strong chromoly frame with a lightweight folding handle system to achieve maximum strength along with portability. The sturdy frame has an electrostatic powder coat finish. The **Go-Ped (Sport Model)** weighs only 20Lbs. but can support up to 400 Lbs. Powered by a precision two-stroke engine that quietly propels itself at speeds of up to 20 mph. Its tires are fabricated of a very resilient natural rubber which will never go flat. The Go-Ped averages well over 100 miles per gallon on pre-mixed unleaded gasoline. Due to a very low center of gravity, riding the Go-Ped is easier than riding a bicycle. To start your Go-Ped just step on and push forward. The Go-Ped folds as quickly and as easily an umbrella for storage and fits in the optional carry bag, which doubles as a cargo carrying backpack. With a space displacement of only 2.5 cu. ft, the Go-Ped can be easily stored in your car, boat, motorhome or airplane.

The **Liquidmatic Go-Ped** is ideal for the crowd that appreciates or needs a unique ultra-smooth hydraulic automatic transmission. The Liquidmatic is available in Yellow with Purple accents. The new **Geo-Sport Model** features a newly designed frame and is lighter, faster and easier on the environment. The Geo-Sport gets over 200 miles per gallon. It features an adjustable clutch to allow idling without moving, making it pushable. It has folding handle bars and a low standing platform for lower center of gravity and increased rider stability. The **Bigfoot** was created in 1997 to take riders off the beaten path. Inspired by the engineering of landing gear for fighter aircraft, the patented cantilevered frame increases simplicity and strength. The Bigfoot features 10" pneumatic tires, high ground clearance and disk brakes.

- Go-Ped (Sport Model) BlueP/N 13-08380 .. \$395.00
- Go-Ped (Sport Model) RedP/N 13-08381 .. \$395.00
- Go-Ped BagP/N 13-08390\$26.00
- Big Foot Go-Ped (black)P/N 13-02990\$458.95
- Geo-Sport Go-Ped (Blue).....P/N 13-02472\$395.00



GSR25 GO-PED SPEED RACER

Incomparable features of the GSR25 include the new stratified Komatsu Zenoah® engine (GZ25N23) equipped with centrifugal clutch, new patented Mad Dog™ Disc Brake System; chain drive transmission, super strong oversized aircraft grade frame and patented cantilevered fork, 10" TT tires fitted with polished magnesium rims and the popular GSR40TSi. Black powder coating. **Specifications:** • Engine: 1.5hp (Komatsu Zenoah GZ25N23) • Max. speed: 21mph • Transmission: chain drive/centrifugal clutch - 6/84 stock ratio • Weight: 28 lbs. • Est. Fuel Econ: 200 mpg • Fuel take cap.: 1.5L • Tires: Street pneumatic (10") • Front disc brakes • Polished magnesium rims • Heavy duty frame and fork • Idle/free wheel capable • Ultra fuel efficient, quieter. P/N 13-03168 .. \$599.95

PROPELLER CEILING FANS



This propeller ceiling fan is fitted with a custom made propeller especially crafted to work as a nostalgic and functional unit...they sound great too. The three speed fan with a light, will run in both forward and reverse and comes in gloss white with a white glass globe. The propeller is available in two shapes, the simple standard as well as in a scimitar shape (my favorite), both are dark stained and finished in a gloss urethane. The fan motor unit is a complete package inclusive of the typical four paddle blades. Includes simple instructions on how to mount and balance the custom hand made propeller in place of the four paddle blades.

- P/N 13-04048.....\$336.00
- P/N 13-04049.....\$599.95



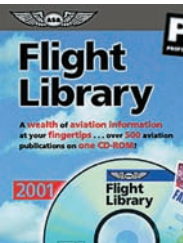
CD-ROMS - SOFTWARE



"121.5" EMERGENCY DVD/VHS

Real life emergencies, actual ATC recordings! Hosted by TV personality and flight instructor MayCay Beeler, this unforgettable DVD features the actual ATC recordings of pilot and ground communications in real emergencies, brought to life with stunning animation and graphics. Listen, learn, and live.

"121.5" DVD.....P/N 13-02854.....\$29.95
 "121.5" VHS.....P/N 13-02855.....\$29.95



2004 PRO-FLIGHT LIBRARY CD

Includes everything in the Flight Library CD, plus: •All 14 CFR (FAR) Regulations (parts 1-199) •Preambles & proposed rules •Hazardous materials (Hazmat Regulations) •EPA and NTSB regulations pertaining to aircraft •Air carrier and ADA regulations •Aviation Law and Legal interpretations •ATC & inspector handbook •All Air worthiness Directives since 1941 • Summary of STC's • General Aviation Airworthiness Alerts • TERPS manual • More than 700 Advisory Circulars • Over 850 publications, & over 6,000 on-line graphics! Includes free CD-ROM update w/product registration. Flight CD library contains over 500 publications including all 3 FAR/AIM books, practical test standards, Dictionary of Aeronautical terms and all the latest FAA handbooks along with Advisory Circulars 00, 20, 30, 40, 60, 70 & 90. P/N 13-01077.....\$69.95

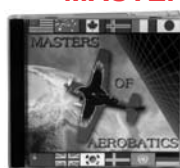
2006 PREPWARE v.8



The complete tool for FAA exam prep. Use your PC to help prepare for your Private, Instrument, Commercial, CFI, Flight Engineer, ATP, & AMT knowledge test.

Private Pilot.....P/N 13-01078..\$39.95
 Instrument RatingP/N 13-01079..\$39.95
 Commercial Pilot.....P/N 13-01080..\$39.95
 Certified Flight Instructor..P/N 13-01081..\$39.95
 Flight EngineerP/N 13-01082..\$39.85
 Airline Transport PilotP/N 13-02565..\$74.75
 All 3 maintenance testP/N 13-01084..\$99.25

MASTERS OF AEROBATICS CD-ROM



The "Masters of Aerobatics" CD-ROM features spectacular aerobatics by Wayne Handley and the legendary Bob Herendeen. The interactive multimedia program contains superb and rare photos, videos in high-res. format of amazing aerial maneuvers, informative interviews, CD-quality music, valuable text. P/N 13-33655.....\$22.50

CD-POCKET

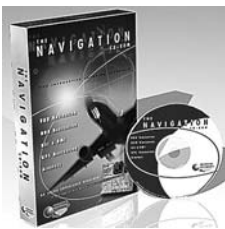


Durable vinyl pocket holds 2 CD-ROMs, 7 hole punched for binder. Set of 10. P/N 13-62800.....\$11.40

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 a favorite navigational 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 scan learn the Bendix/King KLN 89B by AlliedSignal, Garmin GNS530, GPMAP 430, 295 or Apollo GX50/60 all on a single CD • Manufacturers' simulators and operating manuals included • FAA GPS reference materials included •Tutorial runs on both PC & Macintosh systems. P/N 13-01074.....\$83.50

ASA Interactive Demo CD (includes OnTop, IP Trainer, PrepWare, GPS Trainer, Flight Library, & CX-2 P/N 13-01631.....\$9.85



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 can click 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 more time learning 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 P/N 13-00892.....\$95.00



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 on your computer, 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 controls that enable you to specify aircraft direction, airspeed, wind component and other options. Your objective is to set the navigation instruments accordingly, and then turn the aircraft as needed to intercept and track VOR radials and NDB bearings. You can 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 13-01437.....\$66.00

GETTING AROUND ON THE GROUND



The only interactive, multimedia, tool available that teaches types of airport markings, signage and lighting. It also goes beyond simple technical knowledge by outlining hazards, safety 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 preventing runway incursions • Complete descriptions and visuals of airport markings, signs, and lighting • Methods of incorporating knowledge of markings, signs, and lighting in your flight operations • Ground procedures • Safety "Quick Tips" that you can use immediately • Case Studies of real-world runway incursion incidents and accidents • Printable documents from NASA and the FAA. *Getting Around On The Ground* also contains: • 3 hrs of narrated instruction • 15 instructional sections • 125 original 3D graphics & animations • 40 quiz questions • 17 "Quick Tips" P/N 13-01438.....\$28.50

FLIGHT OF VOYAGER CD (Dick Rutan)



This is a recount of the horrific, horrendous, heroic & humorous moments of the Voyager project through the eyes of the pilot Dick Rutan. On Dec. 14, 1986 Voyager took off from Edwards AFB in California and 9 days later landed at the Edwards, completing the first ever non-stop, unrefueled 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.....\$35.00

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 Calculator Continental and Lycoming engine troubleshooting, Battery Tester, Slick magneto, Aircraft bolts, screws and rivets. P/N 13-13-03463.....\$22.50



COMPUTER SOFTWARE

PANEL PLANNER INSTRUMENT PANEL DESIGN SOFTWARE



Panel Planner software gives you the power to design and build instrument panels in record time. Simply drag full-color, photo-realistic instruments, avionics, and cockpit controls into place on an aircraft panel template or photograph. Panel Planner tracks total cost, total weight, and peak current, generates an equipment list, and even prints actual-size hole-cutting templates and color mock-ups. Panel Planner is easy to install and use with its continuous context-sensitive help to guide you every step of the way. The updatable database includes equipment from King, Narco, Sigma-Tek, David Clark, P.S. Engineering, Insight, Garmin, IFR, II Morrow, UMA, Mitchell, Trimble, Arnav, S-Tek, Century, Vision Microsystems, Avidyne, Digifly, Skyforce, and many more; PLUS switches, lights, control cables, vents, circuit breakers, trim indicators, etc. Create labels, color-coded annunciators, or placards.

PANEL PLANNER PRO (2.9 Version)

Our largest update yet! Over 120 megabytes of updated instruments and panels. Panel Planner Pro is designed for the aircraft owner and the homebuilder. Panel Planner gives you the power to design and build instrument panels in record time. Simply drag full-color, photo-realistic instruments, avionics, and cockpit controls into place on an aircraft panel template or scanned photograph. Panel Planner tracks total cost, total weight, and peak current, generates an equipment list, and even prints actual-size hole-cutting templates and color mock ups with your desktop printer. P/N 13-44415...\$252.95

Jeppesen FliteStar Flight Planning Software



FliteStar is the most advanced PC flight planning software that money can buy. A software package that sets new standards for the aviation software industry. Entering flight data for each leg is easy. 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. To make it easy, FliteStar 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 way points by pointing and clicking. View victor airways, VORs, NDBs, intersections, airports, and frequencies. Enter winds for each flight leg, or retrieve them over your modem from Jeppesen. Do weight and balance, speeds, performance, and fuel burn with graphic feedback. Exclusive flight engineer module lets you do "what if" aircraft performance analysis. Optional subscriptions database updates from Jeppesen Sanderson. Change your route by "stretching" it to any other waypoints on the chart. 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 each point on chart. Compute airway and MEAs between VORs for any route manually or automatically. Find common airways between any VOR and/or intersection. Enter winds for each flight leg, or retrieve them over your modem from Jeppesen.

JEPP FLTSTAR VFR N AM WINDOWS.....68273	\$141.55
JEPP FLITESTAR IFR N AMERICA.....6120	\$284.05
JEPP FLITSTAR VFR EUR WIND CD.....69383	\$141.55
JEPP FLTSTR IFR/VFR EUR WINDOW.....6006	\$279.30
JEPP FLTSTAR IFR/VFR WORLDWIDE.....65703	\$854.05
JEPP FLTSTR IFT/VFR AMER. WIND.....65704	\$569.05

Request Quote



COMM 1 VFR/IFR RADIO SIMULATOR

This Windows™ based instructional CD-Rom is the closest thing to talking on the radio in the cockpit. The only way to become comfortable and proficient talking on the radio is with practice, right? 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 management 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)

Comm1 - VFR Radio Simulator.....P/N 13-32221	\$89.95
Comm1 - IFR Radio Simulator.....P/N 13-00093	\$109.95
Comm1 - Clearances on request.....P/N 13-00741	\$93.95
Headset with Boom M/C.....P/N 13-33331	\$24.10
Plug & Play Combo VFR (Comm1 & Headset)P/N 13-34441	\$113.90
Audio Pilot Adapter.....P/N 13-03249	\$34.95

Minimum Sys. Requirements: •486/66 MHz PC processor •4x speed CD-ROM drive •16MB RAM •Sound Blaster-compatible sound card •6MB hard drive space • Mic & speakers (or headset) • 800x600 resolution display w/ 256 colors • Windows 95™

JEPPESSEN FLITESTAR FLIGHT PLANNER W/DATABASE



FliteStar is the most advanced PC flight planning software that money can buy. Entering flight data for each leg is easy. FliteStar calculates the optimum altitude based on total distance, winds aloft and your aircraft's performance. Experiment with different temperatures, power settings and altitudes and see their effects on performance. To make it easy, FliteStar comes with many popular aircraft already installed, including light piston, turbo-prop and jet aircraft. Do "what if" simulations, calculate weight and balance with graphic feedback. **Features:** • 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 way points by pointing and clicking • View victor airways, VORs, NDBs, intersections, airports, and frequencies • Enter winds for each flight leg, or retrieve them over your modem from Jeppesen • Do weight & balance, speeds, performance, and fuel burn with graphic feedback • Exclusive flight engineer module lets you do "what if" aircraft performance analysis • Optional subscriptions database updates from Jeppesen Sanderson • Change your route by "stretching" it to any other waypoints on the chart • 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 each point on chart • Compute airway and MEAs between VORs for any route manually or automatically • Find common airways between any VOR and/or intersection • Enter winds for each flight leg, or retrieve them over your modem from Jeppesen.

FlightStar North America Now Available for IBM & Macintosh PC's!

N. America VFR.....P/N 68273	\$141.55
N. America IFR/VFR.....P/N 6120	\$284.05
European VFR.....P/N 69383	\$141.55
European VFR/IFR.....P/N 6006	\$279.30
Worldwide VFR/IFR.....P/N 65703	\$854.05
Americas IFR/VFR.....P/N 65704	\$569.05

Note: FlightStar IBM versions require IBM PC/Compatible 640K CGA/EGA/VGA hard disk (C). Specify diskette size. Flight Star MAC versions require Macintosh computer with 1MB RAM, hard disk, and density diskettes.

KITLOG PRO SOFTWARE



KitLog Pro is an organizational tool that allows the builder of any type of aircraft to create, archive, maintain, and display the entire building process. Whether your experimental aircraft is a plans-built EAA bi-plane, a Van's RV, a Glastar, or even a Lancair IV-P, KitLog 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.

Features: • Complete Builder's log to satisfy FAA requirements
Detailed Expense Log • Test Flight Log • Maintenance Log • Weight & Balance Calculator P/N 13-03705.....\$49.95

MULTIMEDIA SOFTWARE FLITESCHOOL



In terms of speed, graphics, clarity, and learning value, *FliteSchool* from Jeppesen Software is unequalled in its class. Much more than a series of "flash cards" that help you memorize the answers to FAA exams, *FliteSchool* provides programmed learning modules and Hypertext referencing that leads through a series of associated references to learn more, faster! *Flite School's* Dynamic Cybernetic Learning enhances your training by analyzing your responses and leading you to new subject areas. You'll find studying with *FliteSchool* 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.

Private Pilot.....P/N 13-100507	\$151.95
Instrument.....P/N 13-100519	\$151.95

PS

ELECTRONIC FLIGHT ORGANIZER - POCKET NAVIGATOR

CHARTCASE ELECTRONIC FLIGHT BAG & SOFTWARE



Electronic Flightbags are scaled down laptops computers designed to provide everything a pilot needs in the form of weather and navigation information to complete a flight. Chartcase includes complete FAA data for flight planning, electronic approach charts, and basic off-line flight planner. When connected to the internet, Chartcase provides access to FlightPrep, the multifunction graphical flight planning engine with approach charts and on-course overlays of TFRUs, SUAUs, and 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 to match Chart Case. Off-line, Chart Case has complete FAA instrument approach charts in PDF (printable) format for the entire United States. They are accessed using Chartcase's graphical search engine. The charts are updated every 56 days via CD-ROM. CHARTCASE (without updates).....P/N 13-02075\$278.95 CHARTCASE w/ annual subscription.....P/N 13-02076\$427.95

FLIGHT WTK 1.0 WEIGHT AND BALANCE SOFTWARE



Flight WTK is the world's first weight and balancing safety software exclusively designed for cellular phones. The revolutionary and easy to use safety application can be used anywhere anytime, allowing the pilot to verify the airplane's weight and balance just before take off. The program significantly reduces pre-flight preparation while increasing flight safety! Flight WTK does not make use of premium SMS or other services. Once purchased, the program is completely free to use.

Features: • 100% automatic installation through WAP, no cables required • Graphic display of CG envelope, weight, and CG-point • Stores all your favourite aircrafts and remembers last load and fuel amounts for each one • User friendly, simply type in weight and fuel • Interactive help text for all input menus • Most popular aircraft models pre-installed • Choose between total moment and CG envelope

Compatible Phones: • Motorola A830, C353t, T280i, T720, T720i, V60i, V66i • Nokia 3100, 3300, 3410*, 3510*, 5100, 6100, 6220, 6650, 6800, 7210, 7250, 8910i • Samsung SGH-C100, SGH-E105, SGH-E705, SGH-S100, SGH-S200, SGH-X105 • Sony Ericsson T610, T612, T618, T628, T630, P800, Z600, Z608

* software installation through WAP

Aircraft Compatibility: • Flight WTK can be used on virtually any GA aircraft • Up to 3 seat rows (like Piper PA32 and Beech Baron) • Up to 3 baggage compartments • Supports Avgas, Mogas (Auto fuel), and Jetfuel • Any number of fuel tanks, up to 2 different arms.

P/N 13-02848\$79.00



POCKET NAVIGATOR



Pocket Navigator software turns your Pocket PC into the best handheld GPS moving map display you have ever seen! It's the most portable solution for taking high quality Maptech digital charts into the cockpit. **Here's what you need:** • Pocket Navigator Software • VFR/IFR ChartPack Charts • Pocket PC Computer • GPS Receiver. **Here's what you get:** • Incredibly fast chart display • Create and "GoTo" Routes & Marks • Displays: Position, Speed, Distance, Bearing • Track display: Track Line, Distance/Area calculation

POCKET NAVIGATOR SOFTWARE



System requirements: Pocket PC Operating System (not available for Palm OS or Windows CE); Windows PC (98, 2000, ME, NT, or XP); Terrain Navigator maps, Digital Marine or Aero Charts (sold separately); Industry-standard NMEA 0183 GPS and data cables. NAVMAN GPS works with Compaq 3600, 3700, & 3800 series iPAQsP/N 13-01695\$89.95

POCKET NAVIGATOR / NAVMAN GPS BUNDLE FOR COMPAQ iPAQ

Includes: • Pocket Navigator Software • NAVMAN GPS sleeve for iPAQ • Cigarette lighter 12V adapter for iPAQ4 Suction mounting kit. P/N 13-01696\$339.95



\$99.95

VFR/IFR CHARTPACK

Our VFR/IFR digitized ChartPacks are exact reproductions of government paper charts, produced with the highest degree of accuracy, clarity and calibration. Paper charts are updated frequently, and we build our digital versions on the same schedule. The result: VFR/IFR ChartPacks that are consistently up-to-date. ChartPacks include Windows software for viewing and printing, and charts are Pocket Navigator compatible.

VFR/IFR ChartPacks: SAC, TAC, & WAC charts on CD-Rom **Bi-MonthlyRegion** - Northeast.....P/N 13-01687

- SoutheastP/N 13-01688\$124.95
- SouthwestP/N 13-01689\$99.95
- NorthwestP/N 13-01690\$99.95
- AlaskaP/N 13-01691\$99.95
- Caribbean/Central Amer. ...P/N 13-01692\$99.95
- U.S. set (regions 1-4)P/N 13-01693\$299.95
- Mega region (reg. 1-6)P/N 13-01694\$399.95

Annual SubscriptionRegion

- NortheastP/N 13-01687-1\$199.95
- SoutheastP/N 13-01688-1\$199.95
- SouthwestP/N 13-01689-1\$199.95
- NorthwestP/N 13-01690-1\$199.95
- AlaskaP/N 13-01691-1\$199.95
- Caribbean/Central Amer. ...P/N 13-01692-1\$199.95
- U.S. set (regions 1-4)P/N 13-01693-1\$599.95
- Mega region (reg. 1-6)P/N 13-01694-1\$799.95

WSI INFLIGHT - AIRBORNE WEATHER DATA



You know that WSI provides unbeatable weather data to pilots like you on computer desktops and in FBOs. Now, you can receive an ongoing stream of that same high-quality information... right in the cockpit! 80% of all major U.S. airlines, more than 1,200 corporate flight departments and over 800 FBOs (including all of the top FBOs) rely on WSI weather briefing systems for their pre-flight and operational planning needs. In fact, WSI has been voted the #1 weather service by professional pilots. Co-developed with NASA, WSI InFlight was in

development for 25 years; and its easy-to-read user interface, for 11 years. The result? The most reliable, accurate and convenient weather data solution for the cockpit. WSI InFlight's reasonable flat-rate subscription plans make it a must-have for serious pilots.

WSI InFlight allows you to: FLY SAFE - Get current, complete weather and flight information at a glance. **FLY CONFIDENT** - WSI has been leading the weather industry for over 20 years. It's no wonder so many pilots depend on us. **FLY EFFICIENT** - Prevent reroutes and delays by always having up-to-date flight data. **FLY INFORMED** - Get METARs, TAFs, SPECIs, SIGMETs & AIRMETs, both graphical & textual.

WSI InFlight offers: • Accurate, quality-assured weather data delivered directly to your portable or panel-mounted display • Automatic, consistent updates every 5 min. via satellite broadcast • Coverage at all altitudes anywhere in the continental US • Intuitive, easy-to-use displays designed for inflight use.

Part No.	Model	Description	Suggested Use	Price
11-02411	WSI InFlight AV100 Sys. Kit	Complete WSI InFlight Receiver (Non-Certified), WSI Satellite Antenna & Installation Materials	Portable Display Systems	\$3,395.00
11-02412	WSI AV100 Receiver	Stand Alone Receiver & Installation Materials	Portable Display Systems (for Homebuilts)	\$2,895.00
11-02413	WSI InFlight AV200 Sys. Kit	Complete WSI InFlight Receiver (Certified), WSI Satellite Antenna & Installation Materials	Portable & Panel Mounted Display Systems (for Certified Aircraft)	\$3,241.00
11-02414	WSI AV200 Receiver	Stand Alone Receiver & Installation Materials	Portable & Panel Mounted Display Systems	\$3,007.00
11-02415	WSI Satellite Antenna AV001	Single WSI Satellite Antenna	All WSI InFlight Systems	\$370.95

PS

AIRCRAFT SPRUCE WEST
CORONA, CA • (877) 4-SPRUCE

658
Prices Subject to Change Without Notice

AIRCRAFT SPRUCE EAST
PEACHTREE CITY, GA • (877) 477-7823

ASA IFR SIMULATORS

IP TRAINER VERSION 5.0 IFR PROCEDURES COURSE



IP Trainer is the only IFR simulator with a foundation of artificial intelligence in the form of a virtual instrument flight instructor (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 be saving 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 CFII, 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.

IP Trainer version 5.0.....P/N 13-50100**\$141.95**
 IP Trainer V5.0 bundled w/ On Top™ P/N 13-00656**\$237.95**
 ASA Interactive Demo CDP/N 13-01631**\$9.85**
 Demo On top/IP Trainer, prepware, GPS Trainer, Flight Library & CX-2

ON TOP™ IFR PROFICIENCY SIMULATOR



Version 6.0 of the On Top desktop simulator introduces new features and benefits including:

- An updated U.S. FAA database – All airports (both VFR & IFR), airways, NAVAIDs, intersections, and fixes are included.
- A new worldwide database, including airports, NAVAIDs, intersections, fixes and airways.
- The Beech 1900 turboprop twin aircraft has been added, bringing the total On Top fleet to nine aerodynamically precise aircraft.
- On Top not only has the performance associated with each aircraft, but now

features panels representative of each model. Version 6.0 includes the following singles, high-performance, twin, and turbine airplanes:

- Cessna 172* – representing the 1983 172P, with panel updated to 1998 model.
- Cessna 182* – representing the 1985 182R, with panel updated to 1998 model.
- Cessna 182RG* – representing the 1985 182R, with panel updated to 1998 model.
- Warrior* – representing the 1976 panel.
- Arrow* – representing the 1976 panel.
- Mooney* – representing the 1996 MSE panel.
- Bonanza* – representing the 1972 V35B, w/panel updated to the 1998 model.
- Baron* – representing the BE58 model.
- Beech 1900* – representing the BE1900, D model.

Each aircraft continues to provide for flexibility in the panel: choose a DG or an HSI, an ADF or RMI, add a moving map or GPS, an attitude indicator or a flight director, and adjust the weight to best simulate your flight. Every aircraft and every airport is shown in photo-realistic detail, from perfectly replicated instruments in your panel to the correct approach lights for that airport.

On Top™ version 6.0.....P/N 13-50105.....**\$116.95**
 On Top™ V. 6.0 bundled w/IP Trainer....P/N 13-00656.....**\$237.95**
 On Top™ PCATDP/N 13-00657.....**\$2,925.00**

AUDIOPILOT HEADSET ADAPTER

Wouldn't it be great to eliminate ambient room noises when you flight-sim? With AudioPilot you can! AudioPilot links your computer sound card to your aviation headset—and puts you in the virtual cockpit. It's easy to use—just plug AudioPilot between your headset and the computer and take off! Immerse yourself in the experience and enjoy flight-simming the way it's meant to be.

- Feeds computer sound into headset with high fidelity
- Connects mic for high-quality verbal communication
- Compact, sturdy and convenient
- Plug & play—no software to install

AudioPilot is the perfect companion to your flight-sim setup— and the perfect gift for any armchair pilot. Order yours today!

VCT HEADSET ADPT BATTERY ONLY13-04177**\$39.00**
 VCT HEADSET ADPT W/9V PLUG13-04178**\$49.00**
 VCT HELI AUDIO PILOT13-04179**\$63.00**



HARDWARE OPTIONS FOR ON TOP and IP TRAINER



FLIGHT SIM YOKE USB - Top of the line yoke features 15 button functions, throttle, prop, mixture controls, X&Y trims, gear and flap switches. Requires USB computer connection and Windows 98®. Prop and mixture controls work only with Fly and FlightSim 2000 software.
 P/N 13-00737 ..**\$115.95**



PRO RUDDER PEDALS USB - Features forward/backward slide motion for real simulation flying. Also works well as gas and brake controls for racing simulators. These 3 axes pedals are ideal with the 5 axes USB Flight Sim yoke.
 P/N 13-00738 ..**\$106.95**



ASA DESKTOP FLIGHT SIMULATOR

An interactive flight simulator developed especially for Instrument-Rated Pilots who want tools to stay current and prepare for an Instrument Proficiency Check (IPC), from the comfort of home and under the supervision of a qualified virtual instructor.
 PN 13-03196**\$75.75**

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 be fully prepared for your next Instrument Proficiency Check (IPC) is here. Build confidence in your instrument skills and get over the refresher hurdle with the guidance of our qualified and knowledgeable virtual CFII. Intercept / track NAVAIDs, holding procedures and approaches are all supported with interactive lessons. Use *Instrument Refresher* to stay fresh on the 6-month instrument currency requirements!

PN 13-02935**\$73.00**

VTS MULTIMEDIA TRAINING SOFTWARE

The CDROM software comes loaded with video presentations, sound, 3D animations, interactive system schematics and simulations, all combined to create a virtual tool that comes to life with the click of your mouse. You will find these features throughout the software giving you extensive knowledge of the aircraft inside and out. VTS training tools are priced affordably to allow each student to own a personal copy of the software. Each aircraft's systems are covered in detail far surpassing the general information provided in Pilots 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 animated simulation of the entire system.

Aircraft Systems - Skyhawk	13-03387	\$89.95
Aircraft Systems - Warrior	13-03388	\$79.95
Aircraft Systems Seminole.	13-03389.	\$149.00



JEPPESEN AIRWAY SERVICES - SIMCHARTS

JEPPESEN ENROUTE LOW & TERMINAL CHARTS

GEOGRAPHIC COVERAGE	PART NO.	FIRST YEAR TOTAL	# of 2" Binders Required Order Separately
Full USA <i>All 48 Continuous States</i>	USA05	\$1,026.00	7
East <i>AL, CT, DE, DC, FL, GA, IL, IN, KY, MA, MD, ME, MI, MS, NC, NH, NJ, NY, OH, PA, RI, SC, TN, VT, WI, WV</i>	USB05	\$612.00	4
East & Central <i>AL, AR, CT, DE, DC, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NC, ND, NE, NH, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, WV</i>	USC05	\$875.00	6
Central <i>AR, IA, IL, IN, KS, LA, MI, MN, MO, ND, NE, OK, SD, TX, WI</i>	USD05	\$535.00	3
Central & West <i>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</i>	USE05	\$688.00	4
West <i>AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY</i>	USF05	\$330.95	2
Southwest <i>AZ, CA, CO, NM, NV, UT</i>	USK05	\$243.95	1
Northwest <i>ID, MT, OR, WA, WY</i>	USL05	\$206.95	1
North Central <i>CO, IA, KS, MN, MO, MT, ND, NE, SD, WY</i>	USN05	\$353.95	2
Great Lakes <i>IL, IN, KY, MI, OH, WI</i>	USP05	\$313.95	2
Northeast <i>CT, DE, DC, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT, WV</i>	USR05	\$331.95	2
Southeast <i>AL, FL, GA, MS, NC, SC, TN</i>	USS05	\$327.95	2
South Central <i>AR, LA, NM, OK, TX</i>	UST05	\$267.95	1
N. Cntl. & Gt. Lakes <i>CO, IA, IL, IN, KS, KY, MI, MN, MO, MT, ND, NE, OH, SD, WI, WY</i>	USU05	\$527.00	3
S. & S. Central <i>AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN, TX</i>	USW05	\$463.95	2
California <i>CA</i>	CAL05	\$173.95	1
Florida <i>FL</i>	FLA05	\$155.95	1
Texas <i>TX</i>	TEX05	\$233.95	1
Gulf of Mexico <i>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.</i>	USY05	\$234.95	1

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
Great Lakes, J-GL:Wisconsin, Illinois
East Central, J-EC:Indiana, Ohio
South Central, J-SC:Oklahoma, Arkansas, Louisiana
Texas, J-TX:Texas
Michigan, J-MI:Michigan

EASTERN AREA

Northeast, J-NE:Maine, Massachusetts, Connecticut, New Hampshire, Rhode Island, Vermont
East, J-EA:New York, Pennsylvania, New Jersey
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**\$25.65**

Single Issue Coverage	Single Issue P/N	Single Issue Price	Subscription Price
Florida	13-22710	\$30.00	\$103.00
Mid-South	13-22715	\$35.20	\$121.00
Southeast	13-22720	\$39.95	\$121.00
Mid-Atlantic	13-22725	\$25.70	\$104.00
Texas	13-22730	\$37.10	\$129.00
South Central	13-22735	\$32.30	\$127.00
Central	13-22740	\$37.10	\$127.00
California	13-22745	\$33.00	\$110.00
Southwest	13-22755	\$32.30	\$114.00
Northwest	13-22760	\$25.10	\$95.00
East	13-22765	\$37.10	\$113.00
Northeast	13-22770	\$28.95	\$89.00
Michigan	13-22775	\$24.80	\$84.00
East Central	13-22780	\$33.30	\$102.00
Great Lakes	13-22785	\$31.40	\$110.00
North Central	13-22790	\$37.10	\$127.00
West Central	13-22795	\$105.95	\$101.00



JEPPESEN AIRWAY ACCESSORIES

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 pocketP/N 13-62116-5\$23.75
 30 pocketP/N 13-62116-6\$38.00

CHART POCKET



Transparent durable vinyl pocket holds two enroute charts. 7-hole punched for binder.
 P/N 8063\$11.40

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 13-21748\$6.18

MULTI PURPOSE PAPER FOR JEPPESEN 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\$15.15

JEPPESEN VIEW PRINTER PAPER FOR JEPPESEN BINDERS



Perforated, 7 hole (edge only) • 500 Letter Size sheets • Prints 1,000 Jeppesen size sheets (5.5"x8.5") • Create & print from your software – area charts & approach charts
 P/N 13-33002\$15.15

JEPPESEN 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 the feel of our leather binders. The flo-mold process laminates and binds sturdy, ethylene acetate with a clear tough surlyn outer surface. Available in brown and black.

LEATHER BINDERS

LB-2 Leather, 2" Rings, Stay-Open Bar. P/N 13-21738\$87.40

PLASTIC BINDERS

PB-2 Denlon wrapped, 2" Rings, No Stay-Open Bar.
 P/N 13-21744\$34.20
 PB-1.5 Denlon wrapped, 1.5" Rings, No Stay-Open Bar.
 P/N 13-22792\$25.65

JEPPESEN 7-HOLE PUNCH



the perfect accessory for punching holes in checklist, charts or any other items you want to add to your Jeppesen Binder. Constructed of light weight aluminum yet durable enough for any job.
 P/N 13-01259\$38.00

CD-POCKET



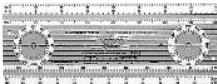
Durable vinyl pocket holds 2 CD-ROMs, 7 hole punched for binder. Set of 10.
 P/N 13-62800\$11.40

PILOTS NOTES



Write it down! Handy for flight planning, enroute notes. Fits Jeppesen Binders. Pkg of 500 sheets.
 Lined Pilots notesP/N 13-06806\$5.70
 Unlined Pilots notesP/N 13-06805\$5.70

PV-5 IFR ENROUTE PLOTTER



Size 3-3/16" x 8-1/2"
 P/N 13-21718\$9.50

CHARTABS



Quick reference tabs labeled, "Departure, Destination and Alternate" help you find your place fast. Plastic color coded. Set of 3.
 P/N 13-21752\$11.40

CHART WALLET



Keeps up to 10 enroute charts at your finger tips. Space saving accordion-fold. Made of durable blue vinyl.
 P/N 13-21746\$6.18

MULTI-TABS



Make your binder work like you do. Write you own labels to separate you contents. Erasable, reusable. Lines for notes. Set/13.
 P/N 8455\$6.65

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 setsP/N 13-63000-2\$5.70
 HP-6000P/N 13-63000-4\$5.70
 International SetP/N 13-63000-3\$5.70

INDEX TABS



Simplify Location of desired charts and index sections in your airway manual or trip kit.
 Set of Alphabetical Tabs ..P/N 13-62541-5 ..\$19.00
 Set of Sectional Tabs.....P/N 13-62513-5\$7.60

AIRWAY MANUAL ACCESSORY PACK



Each pkg Contains: • Chartabs (set of 3)
 • Approach chart protectors (set of 10)
 • NavLog/Flight Plan Forms (set of 50) • Multi-tabs (set of 13) • Pilot Notes (set of 25 lined) P/N 13-62604-6\$23.75

VFR/NAVIGATION LOG PAD

Record all of your flight information in a single convenient log. 50 sheets. Size: 11"x 8.5"
 P/N 13-21734\$9.02

NAVIGATION LOG / VFR FLIGHT PLAN FORM



Perfect Flight Planning partner. Features a weather log. Two sided fits into Jeppesen binders for easy in flight reference. Package of 100. Size: 5.5" x 8.5"
 P/N 13-21754\$6.60

IFR NAVIGATION LOG



Conforms to ICAO standards and recommendations. Standard Jeppesen format. Fits neatly into the Airway Manual Binder. P/N 13-33005\$8.50

PS

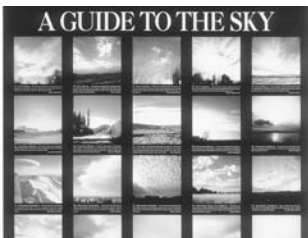
MAPS – CHARTS

WEATHERCYCLER WEATHER KIT



study guide. Size: 8.5" x 11".

This slide chart gives pilots easy-to-understand explanations of weather systems including highs, lows, cold fronts, & warm fronts. The chart shows various weather symbols and provides a guide to become very familiar with aviation weather maps. Laminated for long life. Includes instruction booklet & P/N 13-29949\$9.85



FULL-COLOR CLOUD CHART

"Clouds: A Guide to the Sky" shows full-color photos of 30 different cloud formations, (with descriptions) and the weather associated with each. 25" x 37" on heavy stock. P/N 3591\$5.85



ICE ADVICE™

ICE ADVICE™ provides the pilot a handy reference for avoiding, detecting and escaping icing conditions...one of the top concerns of general aviation instruments pilots. This chart, when employed with the icing risk chart on the front side, can help the pilot decide an altitude change that will lower the icing risk. ICE ADVICE™ is laminated in a durable 10 mil, satin matte finish, and is 8.0" x 5.5" P/N 13-04220.....\$5.85

QUICK REFRESHER CHARTS



These Quick Refresher Charts provide a wealth of useful information that every pilot seems to forget over time. Available to "refresh" the pilot on IFR procedures & regulations, Weather info, VFR procedures & regulations, mountain flying, passenger info (the right seat), flying to Canada, and flying to the Bahamas. These charts are laminated for long life & fit right in your flight bag.

- Quick Refresher VFRP/N 13-40316\$5.95
- Quick Refresher WeatherP/N 13-40416\$5.95
- Quick Refresher IFRP/N 13-40516\$5.95
- Quick Refresher Mtn. FlyingP/N 13-00422\$5.95
- Quick Refresher The Right SeatP/N 13-00423\$5.95
- Quick Refresher Flying to CanadaP/N 13-00424\$5.95
- Quick Refresher Flying to the Bahamas .P/N 13-00426\$5.95

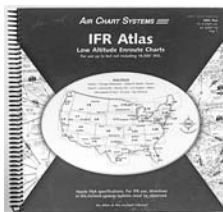
A-V-AIDERS FREQUENCY FINDERS



These handy pocket sized cards provide pilots with commonly used frequencies in Western States. The VFR clearance companion is ideal for beginning student pilots. **VFR Clearance companion** for student pilots. P/N 13-00796\$6.95 **Los Angeles Area Frequency Finder** provides common frequencies used in the busy L.A. area. P/N 13-00795\$6.95 **Bay Area Frequency Finder** provides common frequencies for Santa Barbara northward including the busy San Francisco area. P/N 13-00797\$6.95

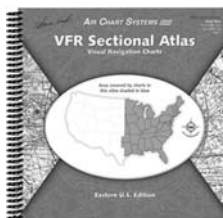
Northern California Frequency Finder provides common frequencies for Santa Barbara area to Oregon. P/N 13-01730\$6.95 **Arizona/Nevada/California Desert Frequency Finder** provides common frequency data for 46 uncontrolled airports in all three states including California desert airports not listed in the L.A. version. Also 20 controlled airports in AZ & NV all the way to Reno/Tahoe, plus 43 VOR in all 3 states. P/N 13-00800\$6.95

AIR CHARTS: IFR ENROUTE CHARTS IN A BOUND VOLUME



IFR charts for the 48 contiguous states presented in one 11"x 11" spiral-bound volume. Charts are easier to locate when you need them, and easier to read in their large presentation. Meets FAA/IFR requirements. Included all 13 NOS are charts shown in full size, every frequency servicing every IFR airport, all VORs plotted in position on flight plan chart, Military training routes, planning charts showing major airways, airports, and topographical features for visual or checking. Includes a coupon to receive 1yr of 56-day updates from the publisher at no extra cost.

48 StatesP/N 8339\$99.00



VFR SECTIONAL ATLAS

Full-scale, Full-color reproductions of FAA/NACO Sectional Charts. No more hassle of finding charts or worrying about FAA ramp checks. Atlas format with convenient page numbering system eliminates the aggravation of folding and unfolding charts in the cockpit. With Air Chart's exclusive update service, you'll always have current, updated VFR Charts. (see E-Z Updater on reverse) Aeronautical data on Sectional Charts includes all NAV/Comm frequencies, controlled airspace, airport identifiers and restricted areas. Only \$99 per year including update service! Eastern U.S. Atlas covers area east of the 97th meridian. Coverage extends westward to include area around Dallas, TX. Eastern VFR atlasP/N 13-02478.....\$99.00 Western VFR atlas.....P/N 13-03170.....\$99.00

AVIATION TOPOGRAPHIC ATLAS



Aviations first full-color chart atlas contains WAC scale charts for the 48 contiguous US states. In addition, all 30 class B Airspace and 130 Class C Airspace 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\$99.00

V SPEEDERS PILOT CARDS



These handy cards 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 for instructors and students. Prepare a card for each aircraft you fly and keep them in your pocket. Set of 5 cardsP/N 13-00463\$6.40

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 & keeneboards. Contains a wealth of important reference information relating to IFR departure, enroute, approach, and alternates. P/N 13-55016\$21.95

PS

VISUAL NAVIGATION CHARTS



Sectional & VFR Terminal Charts for conterminous United States, Hawaii, Puerto Rico and Virgin Islands

Seattle	Klamath Falls	Denver	Dallas/Fort Worth	Brownsville	Seward	McGrath
Great Falls	Cheyenne	Wichita	Memphis	Miami	Juneau	Anchorage
Billings	Omaha	St. Louis	Atlanta	Hawaii	Ketchikan	Salt Lake City
Twin Cities	Chicago	Cincinnati	El Paso	Kodiak	Cape Lisburn	Kansas City
Green Bay	Detroit	Washington	San Antonio	Dutch Harbor	Point Barrow	Charlotte
Lake Huron	New York	Los Angeles	Houston	Aleutian Islands	Fairbanks	Cold Bay
Montreal	San Francisco	Phoenix	New Orleans	Western	Dawson	
Halifax	Las Vegas	Albuquerque	Jacksonville	Whitehorse	Bethel	

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\$8.00
Set of 38 charts (w/o Alaska)P/N 8557\$296.00

NOTE: When ordering charts, complete part no. with first 3 letters of chart title. Ex.: Seattle sectional is P/N 8403SEA.

For Subscription service: Add -SUB (example: 8403SEA-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 no. on file.



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

Terminal Area 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 number 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 and billed to you automatically at every revision until you cancel the subscription. Subscription chart orders require credit card number on file.

Terminal Area ChartsP/N 8064\$4.25
Set of 28 Terminal Charts.....P/N 8524\$102.00

Atlanta	Detroit	Minneapolis	San Francisco
Boston	Honolulu	New Orleans	Seattle
Charlotte	Houston	New York	St. Louis
Chicago	Kansas City	Philadelphia	Tampa
Cincinnati	Las Vegas	Phoenix	Washington
Cleveland	Los Angeles	Pittsburgh	Anchorage/
Dallas	Memphis	Salt Lake City	Fairbanks
Denver	Miami	San Diego	

Cincinnati VFR terminal area & flyway chart
P/N 13-21000.....\$4.25

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.



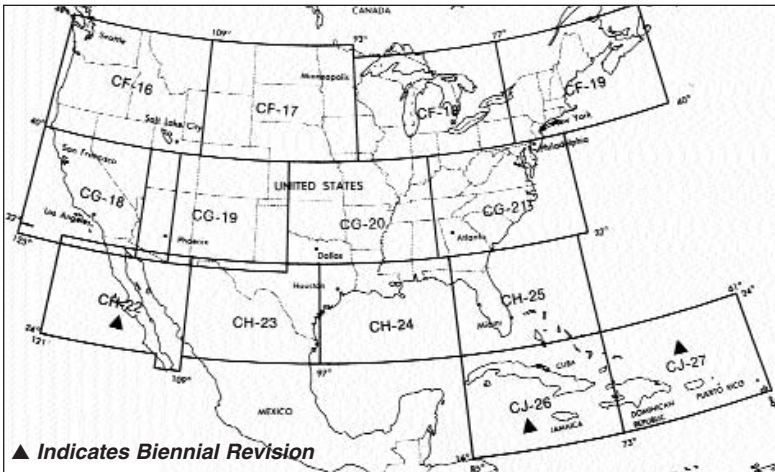
Area	Part No.	Area	Part No.
Southwest U.S.	AFD-SW	East Central U.S.	AFD-EC
Northwest U.S.	AFD-NW	Southeast U.S.	AFD-SE
So. Central U.S.	AFD-SC	Northeast U.S.	AFD-NE
No. Central U.S.	AFD-NC		

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 WalletP/N 13-00412\$19.95

VISUAL NAVIGATION CHARTS



▲ Indicates Biennial Revision
World Aeronautical Charts for the conterminous U.S., Mexico, & Caribbean Areas

WORLD AERONAUTICAL CHARTS

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 ChartsP/N 8567 **\$8.00 ea**
Set of 12 U.S. WAC chartsP/N 8805.....**\$96.00**

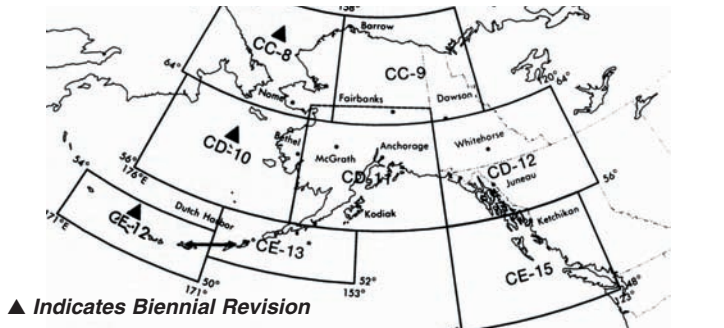
NOTE: When ordering charts, complete part no. with chart number. Example: WAC chart CF-17 is P/N 8567CF-17.

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.

OTHER VFR CHARTS:

- VFR-IFR Wall Planning Chart (U.S.) ..P/N 13-30703 ..**\$4.75**
- U.S. Gulf Coast VFR ChartP/N 13-30704 ..**\$5.00**
- Grand Canyon VFR ChartP/N 13-30706 ..**\$3.35**
- Baltimore-Washington Helicopter Route Chart
P/N 13-30707 ..**\$4.80**
- Chicago Helicopter Route Chart.....P/N 13-30709 ..**\$3.25**
- Houston Helicopter Route ChartP/N 13-30711 ..**\$5.15**
- Los Angeles Helicopter Route Chart ..P/N 13-30712 ..**\$5.15**
- New York Helicopter Route ChartP/N 13-30713 ..**\$4.95**

World Aeronautical Charts for Alaska



▲ Indicates Biennial Revision

CHART MASTER

Chart Master is Aircraft Spruce's new 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.

TERMINAL PROCEDURES COVERAGE OF THE CONTERMINOUS U.S.

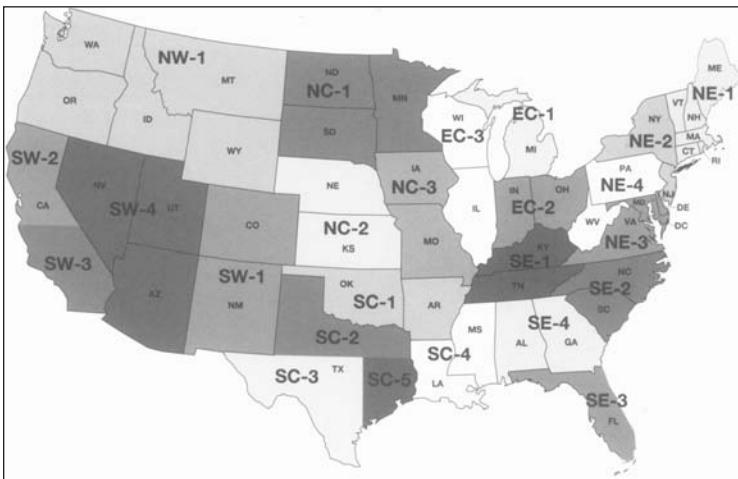
Includes: • Instrument Approach Procedure (IAP) Charts • Departure Procedure (DP) Charts • Standard Terminal Arrival (STAR) Charts • Charted Visual Flight Procedures (CVFP) • Airport Diagrams
IAP Charts are designed to provide an IFR descent from the enroute environment to a point where a safe landing 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**

CALIFORNIA AERONAUTICAL CHART

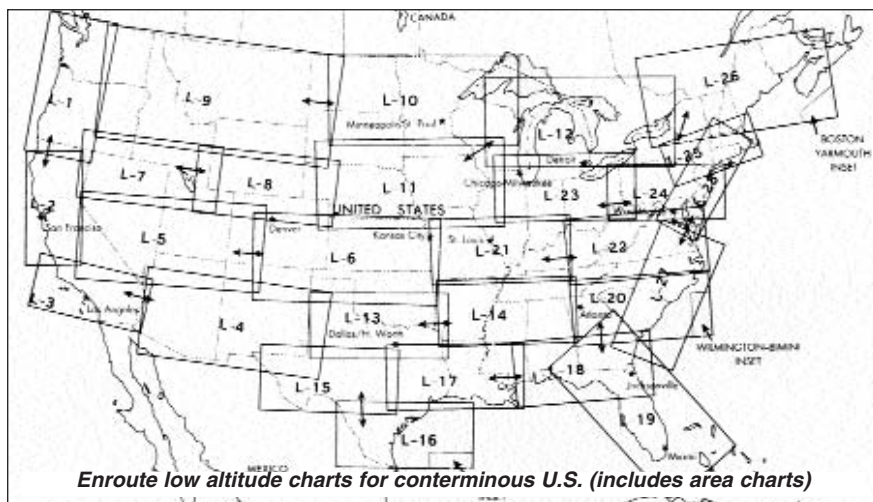
If you are planning a flight within the state of California, check out the 2002-2003 California Aeronautical Chart, which covers the entire state on one page and also include 5 sectional charts (Klamath Falls, San Francisco, Los Angeles, Phoenix and Las Vegas) The chart is designed for planning purposes, not for navigation.

P/N 13-30800.....**\$8.95**

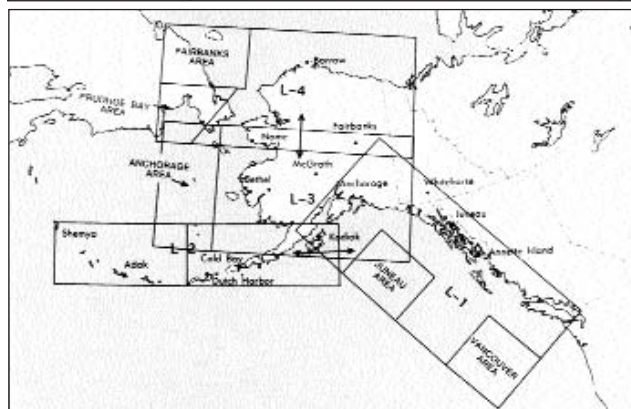


Description	Bound P/N	Loose Leaf P/N	Description	Bound P/N	Loose Leaf P/N
South Central Vol.1	13-01331	13-01364	Southwest Vol. 4	13-00814	13-01546
South Central Vol.2	13-01332	13-01365	East Central Vol. 1	13-01341	13-01354
South Central Vol.3	13-01333	13-00774	East Central Vol. 2	13-01342	13-01355
South Central Vol.4	13-01334	13-00105	East Central Vol. 3	13-01343	13-01356
South Central Vol.5	13-01545	13-02002	North Central Vol. 1	13-01344	13-01357
Southeast Vol. 1	13-01335	13-01366	North Central Vol. 2	13-01345	13-01358
Southeast Vol. 2	13-01336	13-01367	North Central Vol. 3	13-01346	13-01359
Southeast Vol. 3	13-01337	13-01368	Northeast Vol. 1	13-01347	13-01360
Southeast Vol. 4	13-01338	13-00106	Northeast Vol. 2	13-01348	13-01361
Southwest Vol. 1	13-01339	13-01369	Northeast Vol. 3	13-01349	13-01362
Southwest Vol. 2	13-01340	13-01370	Northwest Vol. 1	13-01350	13-01363
Southwest Vol. 3	13-01445	13-01446			

INSTRUMENT NAVIGATION CHARTS



Enroute low altitude charts for conterminous U.S. (includes area charts)



Enroute low altitude charts for Alaska

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	\$4.10/ea.
Full Set (L1/2-L27/28 & Area Chart)	P/N 13-30714	\$57.40
Western U.S. Set (L1/2-L15/16 & Area Chart)	P/N 13-30716	\$36.90
Eastern U.S. Set (L11/12, L13/14, L17/18-L27/28 & Area Chart)	P/N 13-30717	\$36.90
Alaskan Set (Alaskan L1/2-Alaskan L3/4)	P/N 13-30718	\$8.20

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

NOTE: When ordering individual charts, complete part number with the chart number. Example: Enroute Low Altitude Chart L-10 is P/N 8070L-10. For SUBSCRIPTION service, add -SUB (example: 8070L-10-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.



CHART MASTER

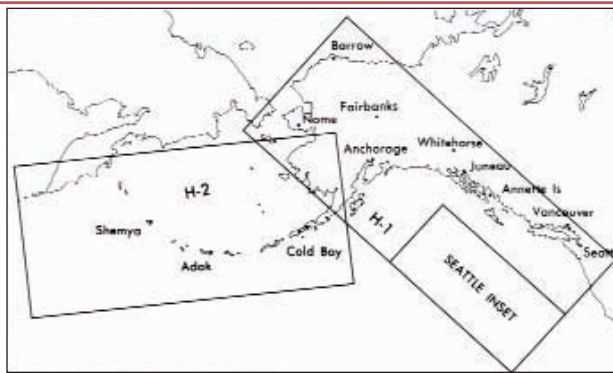
Chart Master is Aircraft Spruce's online chart selection program designed to tell you exactly which aviation charts you will need for the route you intend to fly. Just plug in the 3 letter airport identifiers for your departure and destination airports, and Chart Master will provide you with a list of 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.

IFR 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.

NOTE: When ordering individual charts, complete part no. with the chart no. Ex: Enroute High Altitude Chart H1/2 is P/N 8075-H1/2. Full Set (H1/H2, H3/H4, 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.



PS