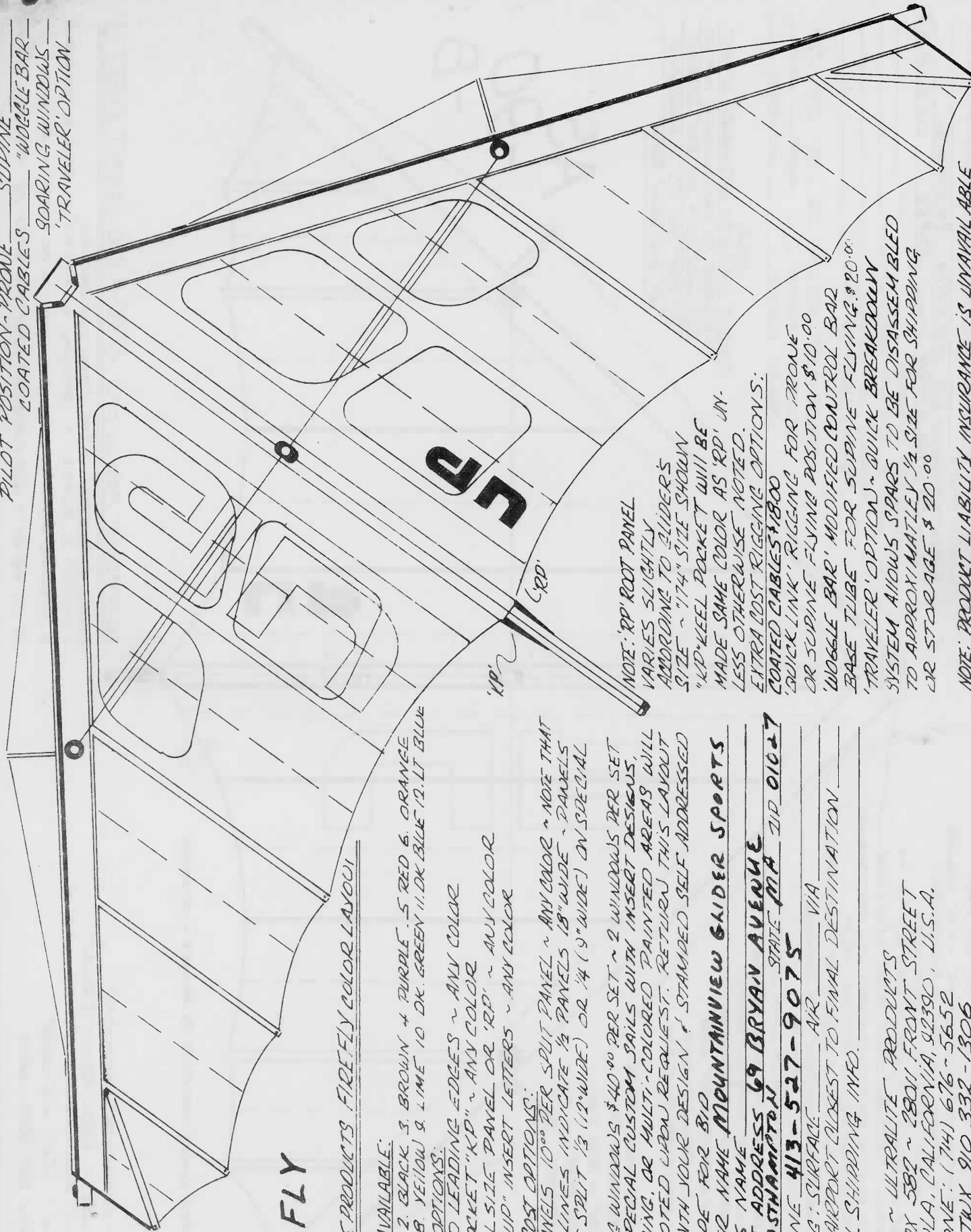


NOTE: PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

GLIDER SIZE ~ SPECIFY PILOT FLYING WT.  
PILOT POSITION - PRONE SUDINE  
COATED CABLES "WOBBLE BAR"  
ROARING WINDOWS  
'TRAVELER' OPTION



## FIREFLY

### ULTRALITE PRODUCTS FIREFLY COLOR LAYOUT

#### COLORS AVAILABLE:

1. WHITE 2. BLACK 3. BROWN & PURPLE 4. RED & ORANGE  
5. GOLD 6. YELLOW & GREEN 10. DK. GREEN 11. DK BLUE 12. LT BLUE  
NO COST OPTIONS:

APPLIED LEADING EDGES ~ ANY COLOR  
KEEL PACKET "KP" ~ ANY COLOR  
ANY FULL SIZE PANEL OR "RD" ~ ANY COLOR  
LARGE "UP" INSERT LETTERS ~ ANY COLOR

#### EXTRA COST OPTIONS:

SPLIT PANELS 10° PER SPLIT PANEL ~ ANY COLOR ~ NOTE THAT  
DOTTED LINES INDICATE 1/2 PANELS 18" WIDE - DARNELS  
CAN BE SPLIT 1/3 (12" WIDE) OR 1/4 (9" WIDE) ON SPECIAL ORDER

ROARING WINDOWS \$40.00 PER SET ~ 2 WINDOWS PER SET  
NOTE: SPECIAL CUSTOM SAILS WITH INSERT DESIGNS,  
LETTERING, OR MULTI-COLORED PAINTED AREAS WILL  
BE QUOTED UPON REQUEST. RETURN THIS LAYOUT  
SHEET WITH YOUR DESIGN & STAMMED SELF ADDRESSED  
ENVELOPE FOR B/D  
DEALER NAME MOUNTAINVIEW GLIDER SPORTS

STREET ADDRESS 69 BRYAN AVENUE STATE CAL ZIP 01027  
CITY EASTHAMPTON TELEPHONE 413-527-9075  
SHIPPING: SURFACE AIR VIA MA OR AIRPORT CLOSEST TO FINAL DESTINATION  
SPECIAL SHIPPING INFO.

UD, INC. ~ ULTRALITE PRODUCTS  
P.O. BOX 582 ~ 28001 FRONT STREET  
TEMECULA, CALIFORNIA 92390, U.S.A.  
TELEPHONE: (714) 676-5652  
TELEX: 740 332-1306

NOTE: 'PP' ROOT PANEL  
VARIES SLIGHTLY  
ACCORDING TO GLIDER'S  
SIZE ~ "1/4" SIZE SHOWN  
"RD" KEEL POCKET WILL BE  
MADE SAME COLOR AS 'RD' UN-  
LESS OTHERWISE NOTED.  
EXTRA COST RIGGING OPTIONS:

COATED CABLES \$1.00  
'QUICK LINK' RIGGING FOR PRONE  
OR SUDINE FLYING POSITION \$10.00  
WOBBLE BAR, MODIFIED CONTROL BAR  
BASE TUBE FOR SUDINE FLYING \$20.00  
'TRAVELER' OPTION, QUICK BREAKAWAY  
SYSTEM ALLOWS SPADS TO BE DISASSEMBLED  
TO APPROX. MATLEY 1/2 SIZE FOR SHIPPING  
OR STORAGE \$ 20.00

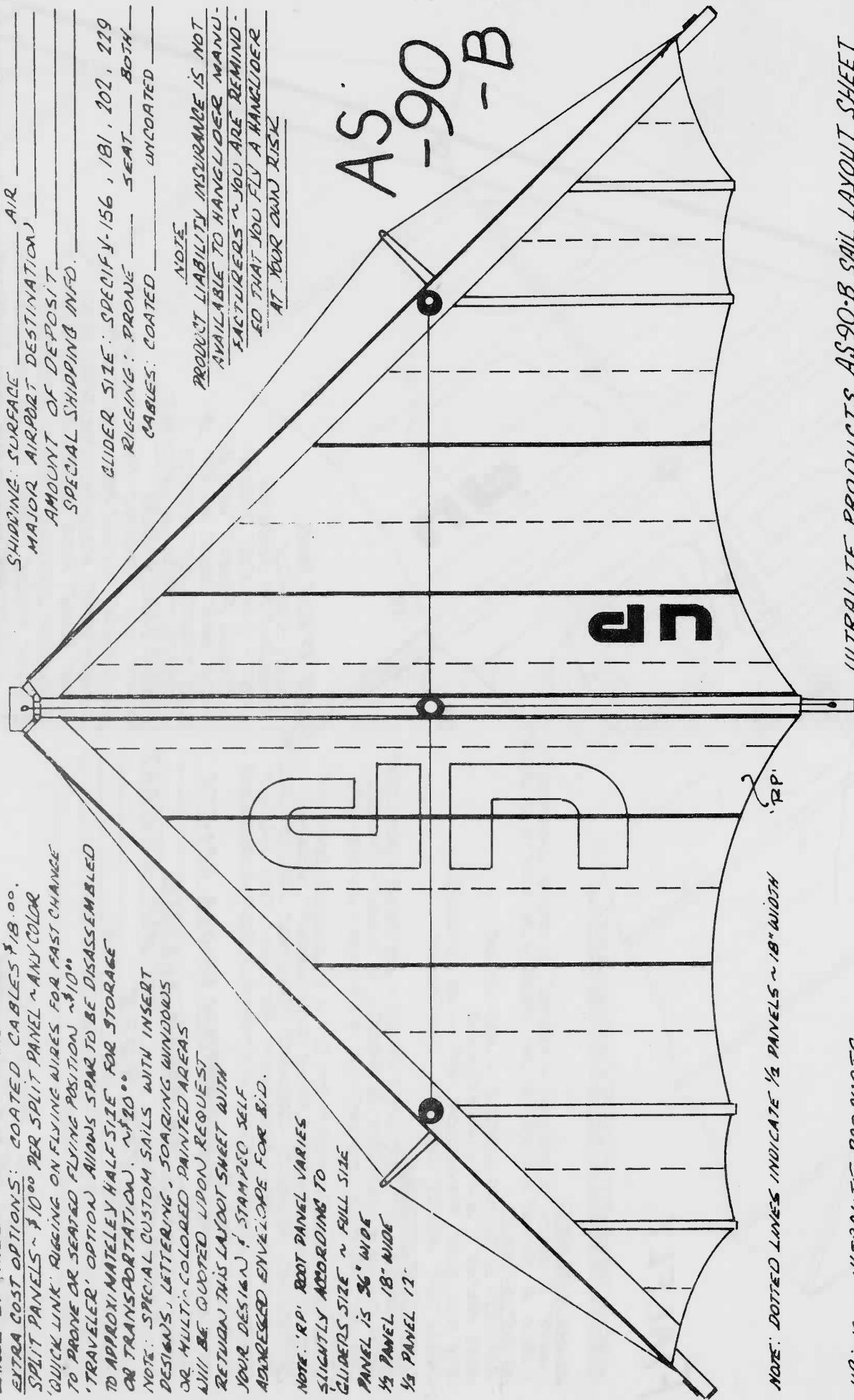
NOTE: PRODUCT LIABILITY INSURANCE IS UNAVAILABLE  
FOR HANGGLIDER MANUFACTURERS. YOU ARE REMINDED  
THAT YOU FLY A HANGGLIDER AT YOUR OWN RISK.

JAN 1977

NO COST OPTIONS: HEAVY DUTY TRAVEL BAG.  
 APPLIED LEADING EDGE SLEEVE ~ ANY COLOR.  
 ANY FULL SIZE PANEL OR "RP" ~ ANY COLOR.  
 LARGE "UP" INSERT LETTERS ~ ANY COLOR.  
 EXTRA COST OPTIONS: COATED CABLES \$18.00.  
 SPLIT PANELS ~ \$10.00 PER SPLIT PANEL ~ ANY COLOR  
 QUICK LINK RIGGING ON FLYING WIRES FOR FAST CHANGE  
 TO PRONE OR SEATED FLYING POSITION ~ \$10.00  
 "TRAVELER" OPTION ALLOWS SPAR TO BE DISASSEMBLED  
 TO APPROXIMATELY HALF SIZE FOR STORAGE  
 OR TRANSPORTATION. ~\$20.00

NOTE: SPECIAL CUSTOM SAILS WITH INSECT  
 DESIGNS, LETTERING, SOARING WINDOWS  
 OR MULTI-COLORED PAINTED AREAS  
 WILL BE QUOTED UPON REQUEST  
 RETURN THIS LAYOUT SHEET WITH  
 YOUR DESIGN & STAMPS TO SELF  
 ADDRESSED ENVELOPE FOR B.I.D.

NOTE: "RP" ROOT PANEL VARIES  
 SLIGHTLY ACCORDING TO  
 GLIDERS SIZE ~ FULL SIZE  
 PANEL IS 36" WIDE  
 1/2 PANEL 18" WIDE  
 1/3 PANEL 12"



UP, INC. ~ ULTRALITE PRODUCTS  
 P.O. BOX 582 ~ 2801 FRONT STREET  
 TEMECULA, CALIFORNIA, 92390, U.S.A.  
 TELEPHONE: (714) 676-5652  
 TELEX: TUX 910 332 - 1305

### ULTRALITE PRODUCTS AS90-B SAIL LAYOUT SHEET

COLORS AVAILABLE: 3.8 OZ. STABILIZED DACRON  
 1. WHITE 2. BLACK 3. BROWN 4. PURPLE 5. RED 6. ORANGE  
 7. SPECIAL GOLD 8. YELLOW 9. LIME 10. DK. GREEN 11. DK. BLUE  
 12. DK. GREEN ~ USE COLORED FELT TIPS TO INDICATE DESIGN



PRICE: # 156, # 181, # 202 \$ 750  
# 229 \$ 775

DELIVERY: 2 1/2 WEEKS

DEPOSIT: 50%

### AS-90-B SERIES GENERAL DESCRIPTION

THE INTRODUCTION OF THE AS-90 IS THE RESULT OF TWO YEARS DEVELOPMENT IN SAIL DESIGN WITH THE WORLD'S MOST ADVANCED GLIDER, THE UP DRAGONFLY. THE USE OF FOAM CORE SANDWICH CONSTRUCTION TAPERED BATTENS, INTRODUCED BY UP IN THE MK II DRAGONFLY, ENABLED THE UP DESIGN TEAM TO APPLY THE INNOVATIVE TECHNIQUE TO A NEW BREED OF "STANDARD" GLIDERS. THIS NEW UP "ADVANCED STANDARD" SERIES WAS DESIGNED WITH TWO MAIN OBJECTIVES. FIRST AN IMPROVED GLIDE RATIO AND MINIMUM SINK RATIO AS COMPARED TO OLDER "STANDARD" DESIGNS AND SECOND, GREATER SAFETY AND QUICKER DIVE RECOVERY POSSIBLE ONLY WITH THE NEW BATTENED, ROACHED TIP SAIL DESIGN FEATURED IN THE AS-90.

WITH THE RECENT STANDARDIZATION OF HANGLIDING RULES FOR INTERNATIONAL COMPETITION BY THE F.A.I. A VERY UNIQUE OPPORTUNITY TO BUILD TO THE LIMIT OF THE RULES WAS PRESENTED. THE RESULTANT AS-90 SERIES DESIGN IS THE MOST COMPETITIVE SHIP OF IT'S TYPE IN THE AIR TODAY. AN IDEAL DESIGN FOR A BEGINNER AND AN EXCELLENT MACHINE FOR THE PROFESSIONAL COMPETITOR IN "STANDARD CLASS". SPECIAL FEATURES LIKE APPLIED LEADING EDGES GIVE PERFECT AIRFOIL SHAPE TO THE LEADING EDGE AND A DEFINITE EDGE ON THE TRAILING EDGE. THE AS-90 IS A SOLID FEELING SHIP IN THE AIR, AND MOST IMPORTANT, VERY EASY TO TAKE OFF AND LAND.

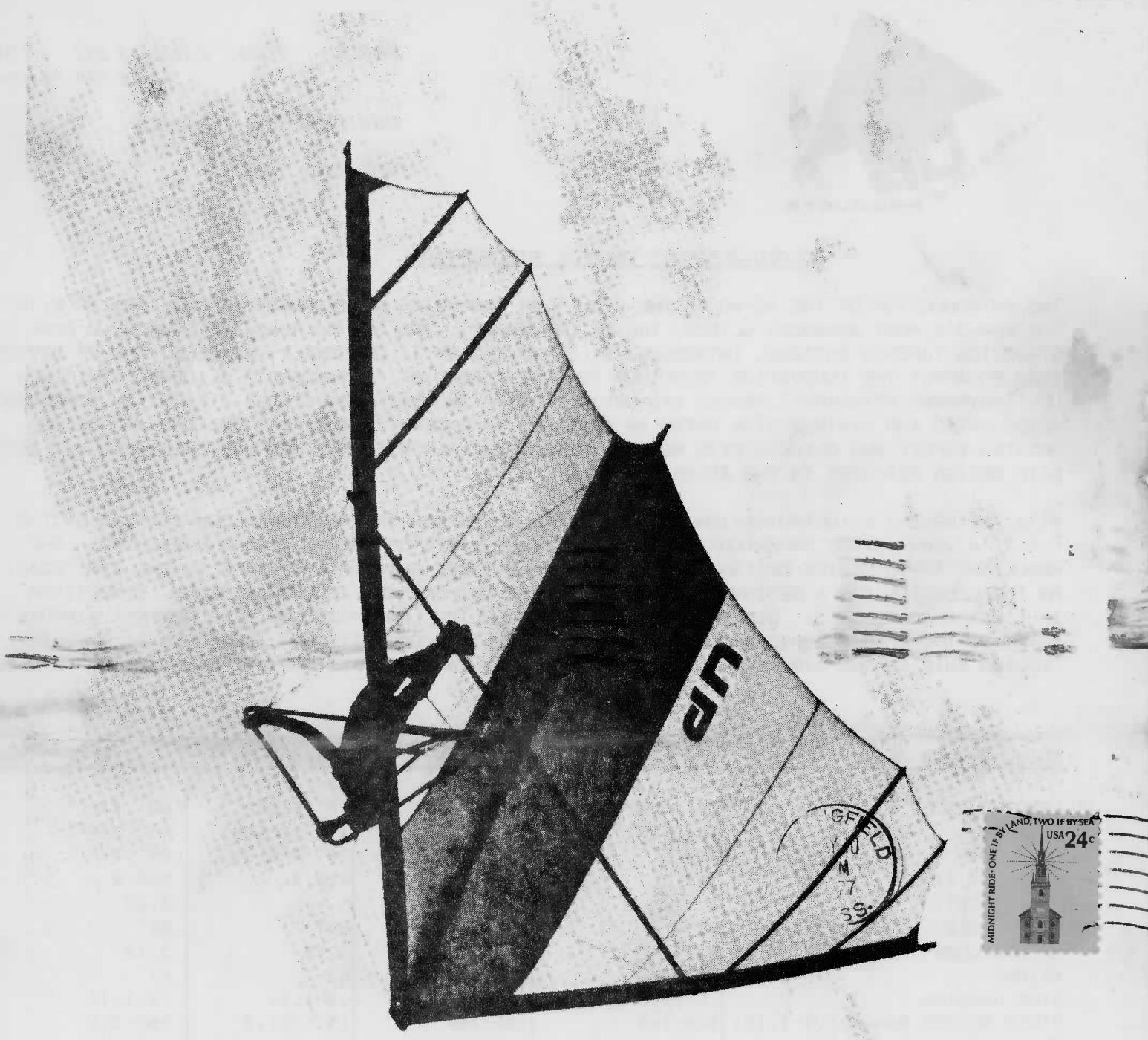
### AS-90-B SPECIFICATIONS

MODEL NUMBER AS90	#156	#181	#202	#229
LEADING EDGE	16' 6-1/4"	17' 9"	18' 9-1/2"	20' 1/4"
KEEL	14' 1/2"	15' 1"	15' 11-1/2"	17' 1/4"
WING SPAN	23' 2"	24' 10-1/2"	26' 4"	28' 1"
AREA (FT 2)	156.3	180.5	202.3	229.6
ASPECT RATIO	3.43	3.43	3.43	3.43
NOSE ANGLE	89°	89°	89°	89°
SAIL BILLION	3.15	3.15	3.15	3.15
WEIGHT	37	39	41	47
WING LOADING	.9-1.15	.9-1.15	.9-1.15	.9-1.15
PILOT WEIGHT RANGE (.9-1.15)	104-143	124-169	141-191.3	160-216
SET UP TIME	4-7 MIN.	4-7 MIN.	4-7 MIN.	4-7 MIN.
STALL SPEED*	15 MPH.	15 MPH.	15 MPH.	15 MPH.
MAX SPEED	35 TO 40	35 TO 40	35 TO 40	35 TO 40
BEST L/D	5.7:1 +	5.7:1 +	5.7:1 +	5.7:1 +
BEST MIN. SINK	290 FPM	290 FPM	290 FPM	290 FPM
SPECIAL FEATURES	APPLIED LEADING EDGES, ADJUSTABLE C.G. MOUNTING BRACKET, FOAM CORE, TAPERED BATTENS, DEFLEXOR SYSTEM			

\*STALL: THE AS-90 STALLS VERY GENTLY AT A VERY HIGH ANGLE OF ATTACK; IT MAINTAINS EXCELLENT LATERAL CONTROL EVEN WHEN STALLED. THIS FEATURE PERMITS HIGHLY CONTROLLED PARACHUTING DECENTS FOR SPOT LANDING CONTESTS.

**UP IS WHERE IT'S AT!**

ULTRALITE PRODUCTS, 28011 FRONT STREET, RANCHO CALIFORNIA, CA 92390 U.S.A. • P.O. BOX 582 • (714) 676-5652 • TWX 910-332-1306



MARK DROY  
17 MT SUGARLOAF APTS  
SUNDERLAND, MA 01375