

# **GLIDER'S SPECIFICATIONS**

The ATLAS' 85 is a lightweight recreational hang glider with exceptionally easy flying characteristics.

The glider's airfoil is defined by aluminium pre-formed ribs. The longitudinal stability (pitch) is supported by luff lines issued from the top of the kingpost maintaining reflex in the center section's trailing edge. Fixed tips provide washout support on the tip section.

	ATLAS 14	ATLAS 16	ATLAS 18
ASPECT RATIO	6.25	6.2	6.1
SAIL AREA (sq.ft.)	143	175	190
SPAN (ft.)	30.5	32	34.5
NOSE ANGLE (*)	120	120	120
WEIGHT (lbs.)	49.5	52.5	64
PILOT WT. RANGE (lbs.)	105-150	120-195	170-270
LOAD FACTORS (g)			31.65
POSITIVE	6	6	6
NEGATIVE	4	4	4
BREAKDOWN LENGTH (ft.)			119
STANDARD	12	12.5	13
OPTIONAL	6	6.4	6.4
TRIKE ADAPTABILITY		11 .	
NOT ADAPTABLE (NA)	NA	NA	7.07
OPTIONAL (OP)			OP

### RIGGING PROCEDURE

Depending on the wind velocity and set-up terrain, there are two basic rigging procedures. Both of which require some general assembling principles.

A hang glider is not susceptible to damage in the air but is vulnerable to damage and wear during transportation if not carefully folded, padded and tied down during rigging and breakdown if handled in a careless manner.

The assemblage of your' 85 atlas should be the first stage of your preflight check.

## Procedure 1 (winds up to 10 mph).

A/ Open the cover bag and remove all padding. B/ If your atlas is broken down to 12', reassemble the leading edges' rear sections and tighten the leading edge sail pockets at the tips. The rear tube marked « D » indicates the right hand leading edge in flight.

C/ Assemble your control bar and insert the push pin (don't forget the safety plate). (Photo 2, 3).

D/ Flip your glider on control bar. Erect the kingpost and connect the kingpost to the noseplate cable with the carabiner. (Photo 4).

E/ Remove all sail ties.

F/ Tilt your atlas on its noseplate (Photo 6). Make a last check to insure that cables are not twisted or caught on any hardware and are well positioned around the control bar corners. Now let both leading edges fall to each side (photo 8, 9, 10, 11).

G/ Remember to secure your keel sliding box with its ball lock pin . (Photo 7).

H/ Separate left and right ribs and position (Photo 5), then proceed to insert ribs from center outward. Insert your washout tubes. (Photo 6).

While inserting your ribs, take care not use unnecessary force, thereby avoiding wear on batten pocket seams. The front rib tip should be centered in its pocket. Once inserted, pull the trailing edge velcro tabs so that all wrinkles (perpendicular to the rib) disappear. Excessive velcro tension will deteriorate both the front of the rib pocket and the velcro tab.

# PROCEDURE 2 (winds over 10 mph)

A/ Follow steps A, B, C, D, E listed in procedure 1.
B/ Disconnect your control bar cables at the nose plate.

C/ Spread both wings on the ground 3/4 of the way out.

D/ Separate left and rights ribs (Photo 5) and insert them from the center outward. Insert your washout tubes.

E/ Place cross tubes under tension and secure the keel sliding box with its ball lock pin.

F/ Erect your atlas' 85 on its control bar and attach the bottom front cable to the noseplate. (don't forget the safety plate).

#### BREAKDOWN/FOLDING PROCEDURE

Breakdown your glider very carefully. Care will extend the life of your glider. Be especially careful if your glider is to be transported for a great length of time.

# PROCEDURE 1 (winds up to 10 mph)

A/ Tilt your fully assembled atlas on its noseplate and pull all ribs out of the sail.

B/ Tilt your glider back to rest on the rear of the keel tube and remove ball lock pin from the keel sliding box.

C/ With one hand located 2 feet behind the nose plate on the keel tube, locate your other hand around the keel sliding box, and pull the latter toward you. Please follow this procedure carefully to avoid damaging the keel tube. Do not force.

D/ Place the glider flat on the ground.

E/ From behind the glider grab both right and left trailing edges and simultaneously raise them slightly to bring both leading edge tubes parallel to the keel.

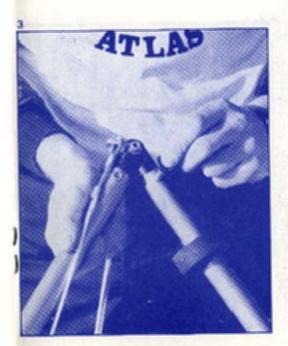
F/ Lay your sail flat on the ground (left sail to the left, right sail to the right). Carefully roll up the sail. G/ Gather all cables and secure them on top of

G/ Gather all cables and secure them on top of the sail with a sail tie. A cleaner appearance is achieved by tying a bungie sail tie from all cables to noseplate carabiner.

H/ Position the cover bag.



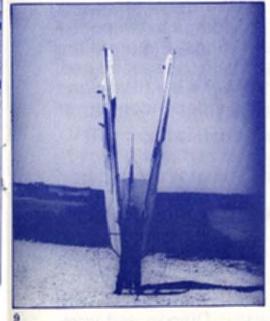


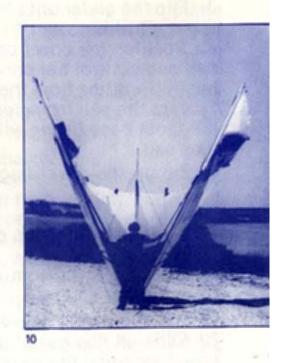




















J/ Flip the glider onto his back and disassemble the control bar.

K/ Position the cover bag paddings between the sail and control bar corner fittings. Separate the keel « U » fitting from the sail with the second pad. Protect the sail from control bar « U » fitting and kingpost base fitting with the independent cover bag pad.

L/ Zip up the cover bag.

## PROCEDURE 2 (winds over 10 mph)

A/ Disconnect bottom front control bar cables from the noseplate.

B/ Lay the glider flat on the ground.

C/ Slide all ribs out of the sail. Disconnect washout tubes and the keel sliding box ball lock pin. Slide cross tubes forward.

Now follow steps E, F, G, H, J, K, L, of breakdown procedure 1.

### TUNING

A/ Trim adjustments.

During the past years with over 6 000 atlas' manufactured a high level of consistency has been achieved.

To trim the speed for various wing loadings the control bar apex must be set in one of the three holes in the control bar bracket. The heavier the pilot, the further forward (towards the nose) the C.G. must be located.

A second option for trim adjustment is to place the hang strap in front of the control bar apex fitting.

B/ Rigging tension.

If rigging is too tight, it will add compression loads on some of the spars and thus create a negative influence on your atlas' handling.

C/ Turn correction/symmetry.

If your glider has a tendency to turn to one side you must first insure that both leading edges are perfectly straight. This operation is quite easy to perform by sliding out the rear section of each leading edge for inspection. A slight difference between left and right L.E. will create enough assymetry to affect glider's flying characteristics. If both L.E. are indentical check for identical sail tension on both leading edge pockets at the tips.

You may also verify proper hang strap location. Small corrections can be performed by tightening the leading edge pocket on the side which has the turn tendency. (or loosening the opposite side).

### MAINTENANCE

#### A/ REPAIR

In the event of a crash or abnormal landing, the sail should be taken off the frame for proper inspection of both leading edges, cross tubes and all junction fittings.

In order to remove the sail from its frame, you must remove all fasteners at the nose, the keel, and both L.E. edge tips. Slide bottom side cables through the sail slots. You can then slide the sail off the frame rearward.

Tubing cannot be sent back, but must be replaced. Sail rips cannot exceed 4" in length. In any case, the sail should be mended by the manufacturer or a qualified sailmaker.

Deformed and bent ribs can be re-shaped but this operation cannot be repeated twice and the air-foil must be respected.

The sail can be cleaned with special chemical products as long as it's thoroughly rinsed off. Caution: do not spill any chemicals onto tubing!

#### B/ TRANSPORT

Proper transportation is important to the care and maintenance of your atlas. No more than 5' of the end of your glider should be unsupported by your car rack. The rack should have proper padding. The glider should be well tied down during transportation and not allowed so it doesn't move in any direction.

#### C/ STORAGE

If your glider was broken down while wet, be sure to dry it out as soon as possible (before 2 weeks). Do not store your glider in an area containing chem-ical gases.

Avoid storing your glider by the ocean.

### D/ CLEANING

In the event of a salt water landing, your atlas should be completely disassembled and every fitting thoroughly washed off in soft water. (All fittings must be reinspected a month later).

Clean all tubing and harware with soft water and natural soap. Use no chemical products.

### E/ PERIODICAL MAINTENANCE

Every 2 months, inspect the state of oxidation of all hardware fittings, and tubing. Every 6 months, a careful inspection of the entire glider (grommets, cables, fasteners, seams, straps, etc.) must be performed.

Before each flight inspect your hang strap and harness carefully.

We sincerely wish you many enjoyable soaring hours on your new' 85 atlas.