

NOTE: THIS INSPECTION CHECKLIST MUST BE COMPLETED ANNUALLY, OR EVERY 100 HOURS OF FLIGHT and/or TETHER TIME, WHICHEVER OCCURS FIRST.

Qualification: Inspection must be carried out by an inspector who is approved by the relevant national airworthiness authority, to inspect the particular type of balloon in the category for intended operation.

Documentation: The aircraft logbook must be present for all inspections. The number of flight hours, any repairs or modifications made since the last inspection, should be correct and up to date. The entries identifying all components of the aircraft should be checked to verify agreement with components inspected. Upon completion, inspection must be recorded showing date, total flight time, maximum temperature indicated on recording (tempil) label.

LINDSTRAND BALLOONS USA- INSPECTION CHECK LIST, ANNUAL/100 HOUR

REG# _____ MODEL _____ ENVELOPE SERIAL NO. _____ TOTAL ENVELOPE TIME: _____

OWNER _____ DATE STARTED _____ WORK ORDER# _____

INSPECTED IAW LINDSTRAND MANUAL FOR CONTINUED AIRWORTHINESS REVISION NO: _____ DATE: _____

BASKET: Part # _____ Serial # _____ Total Time: _____ (if different from envelope)

BURNER: Part # _____ Serial # _____ Total Time: _____ (if different from envelope)

INSTRUMENTS: Model# _____ Serial # _____ Wireless Transmitter # _____

TANKS: (indicate Total Time (TT) if different from envelope)

1 S/N _____ PN _____ TT _____ # 2 S/N _____ PN _____ TT _____

3 S/N _____ PN _____ TT _____ # 4 S/N _____ PN _____ TT _____

5 S/N _____ PN _____ TT _____ # 6 S/N _____ PN _____ TT _____

DOCUMENTS & REQUIRED EQUIPMENT

- A. LOG BOOK
_____ (Temp) record (Tempil) label reading in log book.
_____ components (part numbers and serial numbers) match aircraft logbook
_____ all repairs/alterations correctly entered
_____ airworthiness directives (A/D's) complied with, this inspection entered
- B. FLIGHT MANUAL
_____ present and correct for this model
- C. FAA CERTIFICATE OF AIRWORTHINESS
_____ present and displayed
- D. FAA REGISTRATION CERTIFICATE
_____ present and current
- E. STRIKERS
_____ present and functional (Two sources other than the piezo igniters in the burners required)
- F. FIRE EXTINGUISHER
_____ present and in good condition
_____ Maintain and inspect fire extinguishers IAW the manufacturer's nameplate instructions

INSPECTION PERFORMED BY: _____

INSPECTION CERTIFIED BY: _____ DATE: _____

This balloon found to be in AIRWORTHY / UN-AIRWORTHY (circle one) condition.

ENVELOPE

- _____ A. I.D. PLATE: Present, numbers match logbook

- _____ B. FABRIC STRENGTH (perform tests if over 150 HRS and/or 3 years since manufacturing date)
Envelope areas:
_____ Parachute areas: (outer edge of parachute overlap)
20 lb., 1" grab test over 3 inch span (1 test, warp & weft in each color)
_____ Parachute areas: (Velcro tabs to center patch)
30 lbs 1" grab test over 3 inch span (1 test, warp & weft in each color)
_____ 30 lbs., 1" grab test over 3 inch span (1 test, warp & weft in each color) in the top panel of the balloon
_____ In balloons built with Hyperlife fabric, the first panel below the Hyperlife
30 lbs., 1" grab test over 3 inch span (1 test, warp & weft in each color)
_____ Turning Vent areas: panel behind the outer flap, in each color.
30 lbs., 1" grab test over 3 inch span (1 test, warp & weft in each vent in each color)
_____ Special Shapes- Area of internal formers:
30 lbs 1" grab test over 3 inch span (1 test, warp & weft)
_____ X Series Internal Baffle
Grab test not required, but any damage must be repaired

- _____ C. RECORDING (tempil) LABEL: (At parachute center)
latest installed: reading _____
If previous indicated temp is 275° or above, install a new dated label, record temp indicated in aircraft log book, and attach old label to inspection records.

- _____ D. FABRIC & LOAD TAPE INTEGRITY
gore-by-gore inspection completed, discrepancies recorded
no un-repaired fabric damage.
no damage to vertical load tapes, & all stitching secure
no damage to load tape / envelope cable connection
special shapes no damage to internal formers

- _____ E. CARABINERS (3000 kg or 5000 kg)
free of distortion
no corrosion or rust
locking gates operate freely

- _____ F. SCOOP / SKIRT (Damage allowed, recommend repair at annual/100 hour)
envelope attachments secure and undamaged
lower attachments secure and undamaged
skirt hoop undamaged

- _____ G. ENVELOPE CABLES, STAINLESS STEEL
no visible heat damage, no reduction of flexibility
no abrasion damage or kinks
no more than one broken wire strand
no distortion of thimbles or ferrules
cable attachment covers undamaged
cable to envelope attachment links in good condition and tight

ENVELOPE (CONTINUED)

- H. ENVELOPE CABLES, NON-METALLIC
outer cover heat damage (cables must be replaced if inner core is visible)
cable must remain flexible, cracking of cover when bent requires replacement
no abrasion damage (cable must be replaced if inner core is visible)
splice whipping and secure stitching undamaged
cable attachment covers undamaged
cable to envelope attachment links in good condition and tight
thimbles in good condition and secure

- I. THERMISTOR WIRE
envelope cable undamaged
all wire connectors undamaged

- J. PARACHUTE DEFLATION (RED and WHITE STRIPE) LINE
length correct (must allow envelope to streamer without opening valve)
no melt damage (core not visible, line flexible)
no abrasion damage (core not visible)
lower termination point secure and intact -pulley attachment on double gear
lower pulley / pulleys undamaged, functional, attachment secure
pulley lubricated with silicone spray

- K. SUPERCHUTE
If the balloon is equipped with a superchute, contact Lindstrand USA for inspection and repair procedures.

- L. Q - VENT ACTIVATION LINE (Solid red)
length correct (must allow envelope to streamer without opening valve)
no melt or abrasion damage
lower pulley(s) undamaged, functional and secure
pulley lubricated with silicone spray

- M. TURNING VENT RIGGING
Black line
no abrasion or melt damage
condition good
pulley in good, functional condition
pulley lubricated with silicone spray

Green line
no abrasion or melt damage
condition good
pulley in good, functional condition
pulley lubricated with silicone spray

Vent flag lines and stainless ring or pulley
no twisting or knotting
no abrasion damage or fraying
all knots in good condition

- N. CROWN LINE
length correct
no abrasion damage
attachment clip present and in good condition

- O. CROWN RING
no abrasion damage or burrs

ENVELOPE (CONTINUED)

- _____ P. FREE LOAD TAPES
_____ no abrasion damage
_____ stitching secure and in good condition

STANDARD PARACHUTE

- _____ A. FABRIC INTEGRITY
_____ all fabric in good condition
_____ no unrepaired damage
- _____ B. PARACHUTE CENTERING LINES
_____ each line must be checked for correct length, no abrasions, all knots secure
- _____ C. SHROUD (pull down) LINES & UPPER PULLEY
_____ shroud lines in good condition, knots secure
_____ upper pulley in good condition, free running
_____ pulley lubricated with silicone spray
- _____ D. VELCRO TABS
_____ clean and free of debris
_____ holding force good
_____ stitching intact
- _____ E. PARACHUTE FIT (If in question, inflate envelope and check following)
_____ overlap equal around circumference
_____ no daylight visible
_____ no excessive tension in centering lines
_____ no excessive stress wrinkles at parachute edge
_____ visible seal between parachute fabric and hole edge

Q-VENT

- _____ A. PULLEYS OR RINGS AT PARACHUTE EDGE
_____ pulley undamaged, sheave spins freely
_____ pulley lubricate with silicone spray
_____ inspect rings for wear
_____ no abrasion on attachment loop
_____ verify presence and condition of line stoppers when pulleys are at end of kevlar centering lines
- _____ B. PULLEYS AT END OF CENTERING LINES (Q-Vent 1)
_____ undamaged, sheave spins freely
_____ lubricate with silicone spray
_____ check condition of centering line and pulley attachment knot
- _____ C. PULLEYS OR RINGS AT SIDE of ENVELOPE
_____ pulleys undamaged, sheave spins freely
_____ pulleys lubricate with silicone spray
_____ inspect rings for wear
_____ check condition of attachment loop
- _____ D. INTERNAL LOAD TAPE CROSS ON CENTER PATCH
_____ check stitching is secure
_____ check attachment of Q-Vent solid red line or bridle lines
_____ check condition of pulley and lubricate (if installed-in larger balloons)
- _____ E. COMBINATION CENTERING-PULL-DOWN LINES
_____ check general condition , no abrasion, heat damage or excessive dirt
_____ check knot at parachute edge
_____ check attachment to quicklink at red (or red/white) line pulley (secure, no abrasion)

Q-VENT (CONTINUED)

Q-VENT 3 AND 4

_____ F. RIGGING ON UNDERSIDE OF PARACHUTE
pulleys or rings secure, guide lines flexible, no abrasion

_____ G. LIMITING LINES ON OUTSIDE OF PARACHUTE
Secure, no abrasion, guide rings at crown line secure

VELCRO RIP PANELS

_____ A. FABRIC
general condition equal to surrounding envelope requirements
free of abrasion at edge of Velcro

_____ B. VELCRO
must be clean and have good holding strength

_____ C. PULLEY or PULLEYS AND ATTACHMENT POINTS
pulleys in good condition
attachment points in good condition
lubricated with silicone spray

_____ D. RIP LOCKS
in good condition, no abrasion, attachment secure

_____ E. RIP LOCK LOOP TAPE
in good condition, no excessive abrasion

_____ F. VENT LINE
in good condition, no fraying
length correct (must allow envelope to streamer without opening vent)

_____ G. VENT OVERLYING TAPES
tape and stitching in good condition
tapes must be 5% shorter than corresponding panel seam length

INSTRUMENTS

_____ A. BALL 655 and M55
temperature display checked @ boiling and ambient temp. (+/- 5 degrees F)
variometer zeroing correct
altimeter reads correct altitude
new batteries installed

_____ B. FLYTEC AND OTHERS
temperature display checked @ boiling and ambient temp. (+/- 5 degrees F)
variometer zeroing correct
altimeter reads correct altitude
new batteries installed

BURNER

- _____

A. INNER FRAME (Single and Series 1 JetStream Doubles, Triples, Quads)
 general condition ok
 bolt assemblies, frame to burner
 bolt assemblies, inner to outer frame
- _____

B. OUTER FRAME
 general condition
 corner sockets and cable plates in good condition
 condition of corner welds
- _____

C. CENTER GIMBAL FRAME (Series 2 Burners)
 general condition
 all bolts secure and in good condition
 check gimbal tension in both directions
- _____

D. ADJUSTABLE FRAME
 general condition
 all bolts and locking clasp secure and in good condition
 check ease of operation, high-to-low setting
- _____

E. CARABINERS (3000 kg or 5000 kg)
 free of distortion
 no corrosion or rust
 locking gates operate freely
- _____

F. COIL ASSEMBLY
 coils straight, all welds secure
 coil support brackets straight and secure (no missing stainless rivets)
 check main jets for blockage and tightness
 slurper tubes secure and positioned over a jet
- _____

G. PILOT LIGHT
 pilot light cup secure (check set screw) and aligned with piezo ignitor
 pilot jet free of obstruction (check fuel flow, sound and flame appearance)
 if obstructed, remove and clean jet and both filters in pilot system
- _____

H. PILOT LIGHT REGULATOR
 remove regulator from block and wipe clean
 inspect Screen Filter and clean if necessary
 inspect inner and outer O-Rings (replace if necessary)
 lubricate and reassemble
 regulator valve handle turns freely
- _____

I. PIEZO IGNITOR
 piezo ignitor electrode in good condition
 piezo ignitor actuator button in good condition
 piezo ignitor actuator set screw secure
 check for strong spark to pilot light cup
 inspect damage to ceramic tube
 bezel ring around ignitor tight
- _____

J. MAIN AND LIQUID FIRE VALVES (Toggle and Squeeze Trigger)
 disassemble, inspect and lubricate and reassemble
 check set screws (2) in bottom of handle for security against FLAT side of pivot pin
 check for smooth operation and no leaks
- _____

K. PRESSURE GAUGE
 functions correctly
 needle zeros
 bezel ring tight

BURNER (Continued)

- _____ L. CROSS FLOW VALVE (JetStream DOUBLE, TRIPLE & QUAD)
operates smoothly
no leaks
- _____ M. FUEL LINES
replace fuel hoses after 10 years in service
no cuts or abrasions
no bulging or swelling
- _____ N. ACME (Rego style) HOSE CONNECTOR
good overall condition, no dents or corrosion
threads in good condition
mates to tanks and/or manifolds
functional test for ease of connection and leaks
check valve for self seal function
lubricated with silicone spray
- _____ O. TEMA HOSE END CONNECTOR
good overall condition, no dents or corrosion
inner and outer "O" rings in good condition (replace if damaged)
ball bearings free and lubricated
locking ring functional
functional test for ease of connection and leaks
check valve for self seal function
lubricated with silicone spray
- _____ P. FUNCTIONAL TEST
burner tested, each valve with each tank (minimum 4 activations)
pilot light / piezo ignitor tested, with each tank (minimum 3 activations)

BASKET

- _____ A. I.D. PLATE:
Present, numbers match logbook
- _____ B. CUSHION FLOOR
removed for basket inspection
in good condition
- _____ C. OUTSIDE SKIDS (SOLID OR WOVENFLOOR)
in good condition and bolts tight
nylon skid protectors intact and secure
- _____ D. INSIDE FLOOR (SOLID INSERT ON WOVENFLOORS)
in good condition (only surface cracking permitted)
bolts heads not protruding above top surface
- _____ E. CABLES ACROSS BOTTOM (SOLID FLOORS)
leather / rawhide protective covering in good condition
no evidence of corrosion or abrasion of cables
- _____ F. PLYWOOD FLOOR (NON-WOVENFLOOR BASKETS)
in good condition (only surface cracking permitted)
attachment to stainless frame secure
check integrity of plywood at skid bolts

BASKET (Continued)

- _____ G CLEARVIEW SOLID FLOOR
 in good condition (only surface scratches permitted)
 attachment to stainless frame secure
- _____ H. RAWHIDE OR BOTTOM SCUFF LEATHER
 check general condition and lacing secure
- _____ I. CABLES AND COVERING
 cables undamaged
 thimbles in good condition
 vinyl tubing sleeves in good condition
 heat shrink @ swaged area intact
- _____ J. STAINLESS STEEL TOP AND / OR BOTTOM FRAME
 shape correct (not bent)
- _____ K. TOP BOLSTER, PADDING & LEATHER/SUEDE
 leather or suede, general condition & lacing secure
 foam padding general condition, upright socket covers, general condition & lacing secure
- _____ L. RATTAN
 no broken primary rattan (approx. 3/4" to 1") supports in wovenfloo
 no holes in excess of 2.5" at the widest dimension
 no more than 4 broken vertical strands out of 12 consecutive vertical strands
 no more than 12 broken horizontal strands in a 24" by 24" area
 no excessive breakage of wicker at belt or step holes
- _____ M. FLEXI POLES
 intact
- _____ N. CYLINDER STRAPS
 all present and in good condition
 clasps fully functional
 Installed correctly (upper tank strap over top shoulder of tank)
- _____ O ROPE HANDLES
 Check for Excessive wear
- _____ P. MANIFOLDS ACME (REGO STYLE) OR TEMA HOSE CONNECTOR
 replace fuel hoses after 10 years in service
 correctly installed, no overly sharp bends in hoses,
 no conflict with other equipment
 fuel lines in good condition. no cuts or abrasions. no bulging or swelling
 hose end fittings in good overall condition, no dents or corrosion
 (ACME / REGO) O-Rings and Square rings in good condition. (replace if necessary)
 (Tema) inner and outer "O" rings in good condition (replace if damaged)
 (Tema) ball bearings free and lubricated
 (Tema) locking ring functional
 mates to tanks and burner fuel line
 functional test for ease of connection and leaks
 check valve for self seal function
 lubricate with silicone spray
- _____ Q. DOCUMENT DISPLAY CASE
 attachment secure
 in good condition

FUEL TANKS:

#1 S/N _____ #2 S/N _____ #3 S/N _____
 #4 S/N _____ #5 S/N _____ #6 S/N _____

#1	#2	#3	#4	#5	#6	
_____	_____	_____	_____	_____	_____	A. check valve handle for tightness
_____	_____	_____	_____	_____	_____	B. O-Rings on ACME (Rego style) valve checked for damage
_____	_____	_____	_____	_____	_____	C. test ACME (Rego style) / TEMA fittings for self seal
_____	_____	_____	_____	_____	_____	D. test QSO valve with burner connected to assure function
_____	_____	_____	_____	_____	_____	E. protective caps present and in good condition
_____	_____	_____	_____	_____	_____	F. pressure relief valve clean and covered
_____	_____	_____	_____	_____	_____	G. 15% valve operation checked
_____	_____	_____	_____	_____	_____	H. tightness of (4) fuel quantity gauge screws checked
_____	_____	_____	_____	_____	_____	I. tank body free of dents or gouges
_____	_____	_____	_____	_____	_____	J. tank welds in good condition
_____	_____	_____	_____	_____	_____	K. tank covers in good condition
_____	_____	_____	_____	_____	_____	L. re-certification status checked
_____	_____	_____	_____	_____	_____	M. heat tapes installed correctly and in good condition

DAMAGE and REPAIR LOG

DAMAGE	AREA or COMPONENT	REPAIR METHOD	REPAIRED BY