

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

B7CH
Revision 2
AERONAUT INSTRUCTION
RESEARCH
Skysailor 90
Skysailor 105
March 9, 2015

TYPE CERTIFICATE DATA SHEET NO. B7CH

This data sheet, which is part of Type Certificate No. B7CH, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Aeronaut Instruction Research
1445 East River Parkway
Minneapolis, MN 55414

I - Model Skysailor 90, Hot Air Balloon, Approved April 21, 1995

Envelope AIR envelope, Drawing 9200. Volume: 90,000 cu. ft.
Air Heaters Mirage Burner Assembly, Balloon Works P/N B401.
Basket AIR Basket Item No. 9400
Fuel Commercial LPG
Maximum Weight The gross weight limited to 1600 lbs. or to the weight requiring maximum continuous envelope temperature of 250°F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature
1. Never exceed: 300°F.
2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250°F. to 300°F.
3. Maximum continuous: 250°F.
Minimum Crew One (1) Pilot.
Maximum Passengers Five people, including pilot.
Fuel Capacity One Balloon Works P/N 3661-1 Master fuel tank and one, two, or three Balloon Works P/N 3661-2 Slave fuel tanks. (15 gal. each).
Serial Nos. Eligible SS90-001 and up.

II - Model Skysailor 105, Hot Air Balloon, Approved February 27, 1996

Envelope AIR envelope, Drawing 105200. Volume: 105,000 cu. ft.
Air Heaters Mirage Burner Assembly, Balloon Works P/N B401.
Basket AIR Basket Item No. 9400
Fuel Commercial LPG
Maximum Weight The gross weight limited to 1600 lbs. or to the weight requiring maximum continuous envelope temperature of 250°F., whichever is less. See Balloon Flight Manual.
Allowable Envelope Temperature
1. Never exceed: 300°F.
2. For no longer than 10 minutes continuous or 10 minutes per 2 hours of flight: 250°F. to 300°F.
3. Maximum continuous: 250°F.
Minimum Crew One (1) Pilot.
Maximum Passengers Five people, including pilot.

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Fuel Capacity One Balloon Works P/N 3661-1 Master fuel tank and one, two, or three Balloon Works P/N 3661-2 Slave fuel tanks. (15 gal. each).

Serial Nos.
Eligible SS105-001 and up.

Data Pertinent to All Models

Certification
Basis Part 31 of the Federal Aviation Regulations dated July 1, 1964, as amended by 31-1 and 31-5. Application for Type Certificate dated April 28, 1993. Type Certificate No. B7CH issued April 21, 1995.

Production
Basis None. Prior to original certification of each balloon, an FAA representative must perform a detailed inspection for workmanship, materials, conformity with the approved technical data, and a check of the flight characteristics.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

In addition to the above required equipment, the following equipment is also required:

Two sources of ignition (burner lighter-striker or equal).
DOT Approved Helmets for pilot and passengers.
FAA Approved Balloon Flight Manual dated April 21, 1995, or later approved revision.

Maintenance and
Inspection Maintenance and Inspection of this aircraft must be carried out according to the most recent publication of the Aeronaut Instruction Research Instructions for Continued Airworthiness. The envelope fabric must withstand a 15 pound grab tensile test, with special attention given to lighter colors and upper portions. Vertical load tapes must withstand a 1,000 pound pull test.

NOTE 1. A current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification.

NOTE 2. Reserved.

NOTE 3. Reserved.

NOTE 4. Each hot air balloon envelope must have an individual registration number. An individual envelope is eligible for a Standard Airworthiness Certificate when mated with any approved combination of basket and burner assembly for that model balloon. Change to an eligible combination must be documented by making a logbook entry endorsed by pilot in command or certified mechanic.

NOTE 5. For VFR night flight, approved position lights must be installed.