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Ventus b/16.6

FLIGHT MANUAL

AMENDMENT LIST
(log of revisions)

No.	Reference/short title	Page	Date
4.	<u>Technical Note No. 349 - 2:</u> affected: Sailplanes being ex- ported to the Netherlands	11,16, 27,46	Oct 1984
5.	<u>Technical Note No. 349 - 8:</u> Optional installation of a tail wheel (instead of standard skid)	21, 32	Oct 1986
6.	<u>Technical Note No. 349 - 14:</u> Optional tilt up instrument panel	5, 6, 29, 30	Sept 1987
7.	<u>Technical Note No. 349 - 12:</u> Revisions for Italian Type Approval	25,27,28	Febr. 1988
8.	<u>Technical Note No. 349 - 4:</u> Cloud flying not approved in Canada	1/2 25,45	April 1989
9.	<u>Technical Note No. 349 - 15:</u> Nose and c/q tow release mechanism	24	April 1991
10.	<u>Technical Note No. 349-31</u> Installation of an emergency bail out assistance system - optional all serial numbers -	1/2, 50, 51, 52, 53, 54	Oct. 2006

5. Supplements

5.1 Emergency bail out assistance NOAH

Section 1: General

Brief description of the emergency bail out assistance NOAH

NOAH is a system to facilitate the bail-out of the cockpit in case of emergency. NOAH is a supplementation to the parachute.

NOAH features an airbag similar to a car airbag. The gas which is necessary to inflate the bag is stored in a pressurised gas cylinder. The actuation is by mechanical means via a yellow and black marked handle at the right hand side canopy frame.

To avoid inadvertent activation of the system on the ground the release handle is secured by a spring cotter. The spring cotter must be removed before flight and must be installed best after the landing, latest at the end of daily flight operation.

To actuate NOAH the canopy must be opened or jettisoned first. When the canopy is closed it is not possible to activate NOAH because the handle is blocked by a plate attached to the canopy frame.

If the NOAH system is activated by pulling the NOAH handle the Bowden cables will first open the seat harness buckle and then the valve of the pressurised gas cylinder. The pilot will be lifted by the airbag so that he can roll himself out of the cockpit.

Note: There is a small hole in the NOAH airbag at the front end. In case of inadvertent inflation of the airbag gas can stream out of this hole. This is to prevent injuries to the pilot if the seat harness buckle is not open.

Technical data:

Mass of all parts:	approx. 4,5 kg
Generation of pressure:	nitrogen approx. 200 bar
Filling time:	approx. 2 seconds
Design range:	pilot mass 110 kg up to 4 g

Aircraft handling, care and maintenance

For inspections and maintenance please refer to the "Manual for the emergency bail out-assistance NOAH for Schempp-Hirth single seater".

5.1 Emergency bail out assistance NOAH (cont.)

Section 1: Normal procedures

1.2 Cockpit description

The NOAH handle is located on the right hand side canopy frame and is marked yellow and black.



The following placard is located on the cover for the pressurised gas cylinder behind the back rest:

Secure valve before removal of the
compressed gas cylinder!
Only use provided spring cotter!

The checklist prior to take-off is amended by the securing spring cotter for the NOAH actuation handle

CHECK LIST BEFORE TAKE-OFF
<ul style="list-style-type: none">○ Parachute securely fastened ?○ Safety harness secured and tight ?○ Back rest (if installed) and pedals in comfortable position ?○ All controls and instruments easily accessible ?○ Airbrakes checked and locked ?○ All control surfaces checked with assistant for full and free movement in correct sense ?○ Trim correctly set ?○ Flaps set for take-off ?○ Canopy closed and locked ?○ NOAH: Cotter pin from release handle removed?

5.1 Emergency bail out assistance NOAH (cont.)

Section 3: Emergency procedures

Use of NOAH in case of an emergency bail out

Note: We recommend strongly the use of an automatic parachute.
Only with an automatic parachute the bail out procedure will be nearly automatic and precious time and altitude can be saved.

Emergency bail out with NOAH:

1. For the bail out jettison the canopy first (see flight manual section 3.3)

Warning: If there are safety bows at the rudder pedals make sure that your feet are out of the safety bows first.

2. Then pull the NOAH handle (at the right hand side of the canopy frame, marked in yellow and black) strongly and quickly up to its stop (When the airbag fills, legs will make the instrument panel tilt up).
3. When the airbag is filled, tuck up legs a little and roll out of the cockpit to the side. If the canopy has not been jettisoned completely from the fuselage roll out to the left hand side.
4. Pull rip cord of manual parachute at a safe distance and height.

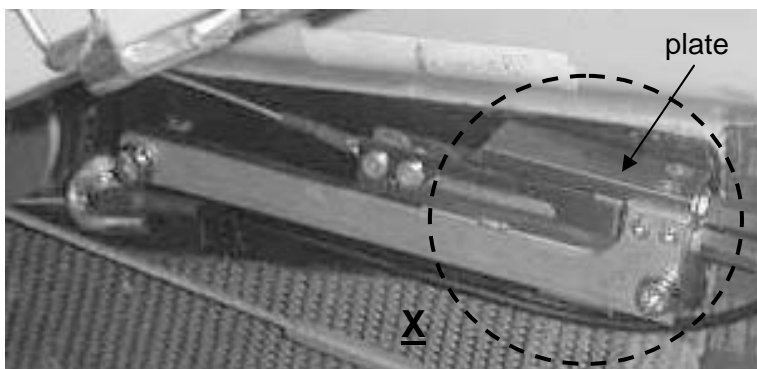
Note: Don't operate the NOAH handle on the ground with canopy open as you may release NOAH and the pressurised gas cylinder must be filled again.

5.1 Emergency bail out assistance NOAH (cont.)

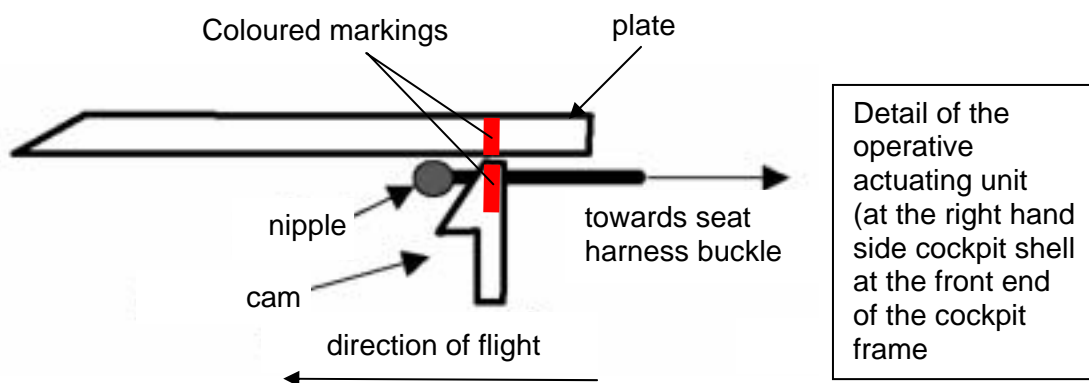
Section 4: Normal procedures

4.1 Daily inspection

- a) Check that the transport securing device (cotter pin) has been removed from the pressurised gas cylinder.
- b) Check the airbag, the high pressure hose and the operating cables for correct positioning and for any wear.
Check especially if the nipple of the cable which opens the seat harness buckle is positioned aft of the cam of the actuation unit (see sketch). In addition the colour markings on the plate and the cam must be in-line.



Detail X (with correct position of nipple and cam):



- c) For normal opening of the seat harness buckle rotate the buckle only in clockwise direction.
- d) For inspections and maintenance please refer to the "Manual for the emergency bail out-assistance NOAH for Schempp-Hirth single seater".

5.1 Emergency bail out assistance NOAH (cont.)

Section 4: Normal procedures

4.2 Pre-flight inspection

Remove securing spring cotter from the NOAH handle before flight.

When the backrest is adjusted take care that the NOAH-airbag is not clamped below the backrest!