



## STATICAL TEST REPORT No. 1010

Element	Storch HS Jabiru wing structure
Purpose	structure strength at positive and negative g
According to	LTF UL 337
Date:	15/12/03

Supervisor	Aldo Cattano
Executor	M. Stafuzza, G. Stafuzza, D. delle Vedove, S. Franceschini
Witness	Mr. Brian Franken

According to mentioned LTF UL 337 methods, we load the wing with constant span-wise load and at 35% of chord.

MTOW: 472.5 kg

Wing weight: 56 kg

Minimum fuel 12.5 kg

Weight used for test is:  $472.5 - 56 - 12.5 = 404$  kg

Factor used are: 4 (g-factor) for ultimate positive semi-wing load factor;

2 (g-factor) for ultimate negative semi-wing load factor

1.5 (safety factor LTF UF 303)

Total load on a semi-wing:  $(472.5 - 56 - 12.5) / 2 = 202$  kg

Ultimate positive semi-wing load factor:  $(202 * 4 * 1.5) = 1212$  kg

Ultimate negative semi-wing load factor:  $(202 * 2 * 1.5) = 606$  kg

The load has been applied using sand bag of 30 kg. each.

We apply load for approximately 1 min. long.

We did not observe any abnormal deformation during the test and any permanent deformation after the load was removed.

It is shown the deformation table attached, made with 4 point of measurement.

PHOTO ATTACHED TO STATICAL TEST REPORT



Fig.1: SIDE VIEW WITH WING UNDER POSITIVE g LOAD



Fig.2: SIDE VIEW WITH WING UNDER NEGATIVE g LOAD

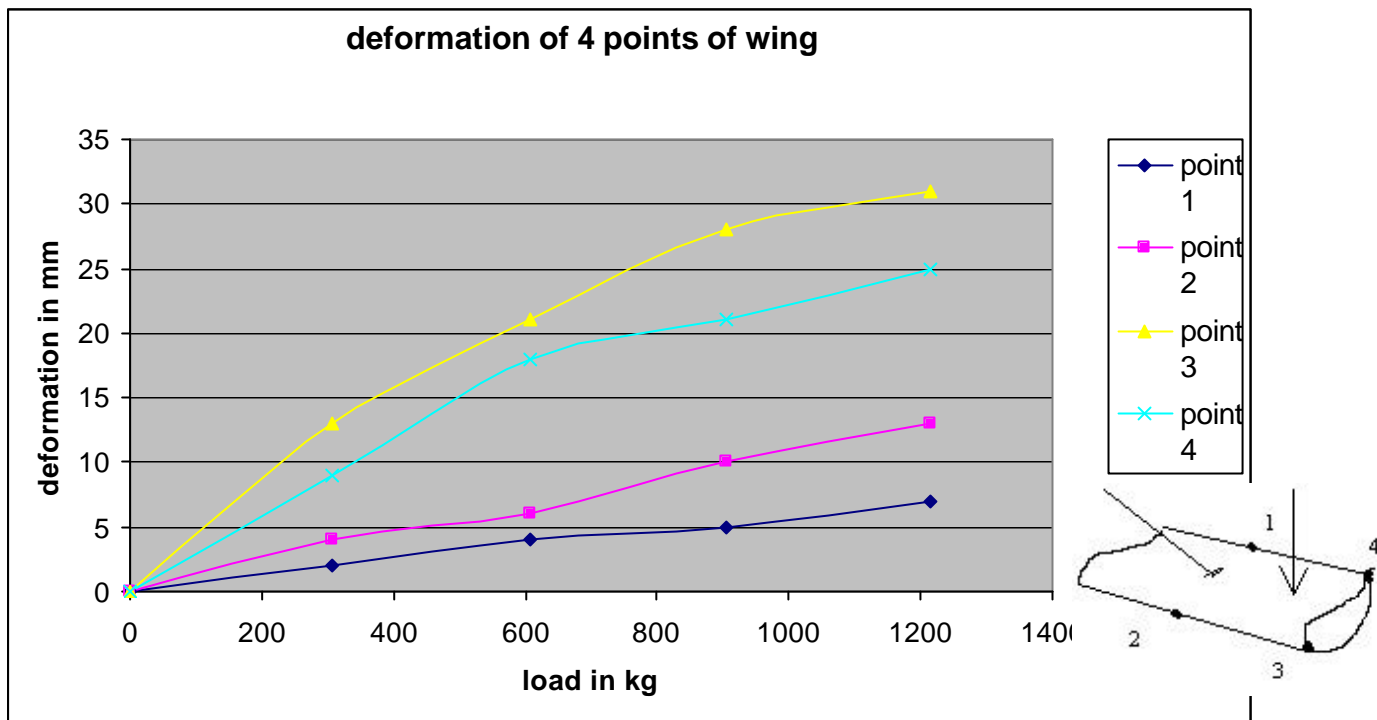


Fig. 3 : DEFORMATION TABLE OF POSITIVE g LOAD

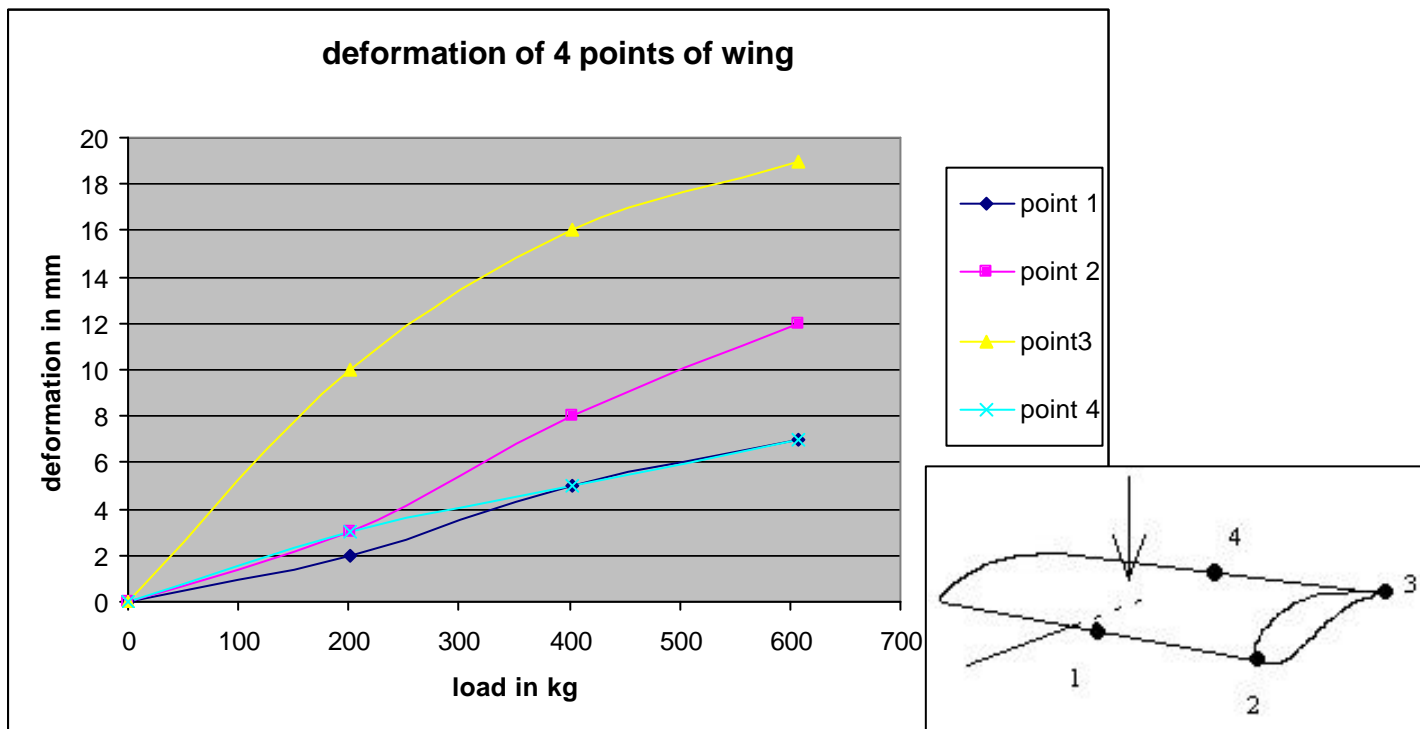


Fig. 4 : DEFORMATION TABLE OF NEGATIVE g LOAD

Result: **positive**

Signature of responsible person:  
Mr. Aldo Cattano

