## FTR - Flight Test Report

| Manufacturer | SKYWALK   | Type testing No. | EAPR-GS-0590/16    | JE LOS   |
|--------------|---|------------------|--------------------|--|
|              | Skywalk GmbH & Co.KG<br>Windeckstr. 4<br>D-83250 Maquartstein | serial number    |                    | Messen   Prüfen   Bewerten<br>Rev. 2.3 - 26.11.2014          |
| Model        | Chili 4-L   | Location         | Schlick, Stubaital | EAPR GmbH - Marktstr. 11<br>D-87730 Bad Grönenbach - Germany |
| Comment      |   | Location         | Kössen             |  |

se, vervielfältigt werden

| Date of testing       | 09.12.2016 | Minimum take<br>105 kg | eight | Maximum take off weight<br>135 kg |             |    |       |
|-----------------------|------------|------------------------|-------|-----------------------------------|-------------|----|-------|
| Testpilot             |            | Pascal Purin           |       |                                   | Anselm Rauh |    | 200   |
| Harness               |            | EAPR Equipment         |       |                                   | EAPR        |    | des P |
| Pilot's take off weig | ht         | 100                    | kg    |                                   | 133         | kg | AND A |

| Classification B |
|------------------|
|------------------|



| Test-criteria                                       | criteria                            |  | Evaluation | Maximum take off weight                                 | Evaluation |  |
|---|-------------------------------------|--|------------|---|------------|--|
| 1. Inflation / take-off - 4.4.1                     |                                     |  |            |   |            |  |
| Rising behavior                                     |                                     | no pilot correction required                             | А          | no pilot correction required                            | А          |  |
| Special take off technique required                 |                                     | No   | A          | No  | A          |  |
| 2. Landing - 4.4.2                                  |                                     |  |            |   |            |  |
| Special landing technique required                  |                                     | No   | А          | No  | А          |  |
| 3. Speeds in straight flight - 4.4.3                |                                     |  |            |   |            |  |
| Trim speed more than 30km/h                         |                                     | Yes  | А          | Yes   | А          |  |
| Speed range using the controls larger than 10km/h   |                                     | Yes  | A          | Yes   | A          |  |
| Minimum speed                                       |                                     | Less than 25 km/h  | А          | Less than 25 km/h                                       | А          |  |
| 4. Control movement - 4.4.4                         |                                     | 2000 Mail 20 Mini  |            |   |            |  |
| Max. weight in flight up to 80kg                    |                                     |  | -          |   |            |  |
| Max. weight in flight 80 to 100kg                   |                                     |  | -          |   | -          |  |
| Max. weight in flight greater than 100kg            |                                     | Increasing >65 cm A Increasing >65 cm                    |            |   | А          |  |
| 5. Pitch stability exiting accelerated flight - 4.4 | .5                                  |  |            |   |            |  |
| Dive forward angle on exit                          |                                     | Dive forward less than 30°                               | А          | Dive forward less than 30°                              | A          |  |
| Collapse occurs                                     |                                     | No   | A          | No  | А          |  |
| 6. Pitch stability operating controls during acco   | elerated                            | flight - 4.4.6   |            |   |            |  |
| Collapse occurs                                     |                                     | No   | А          | No  | А          |  |
| 7. Roll stability and damping - 4.4.7               |                                     |  |            |   |            |  |
| Oscillations  |                                     | Reducing   | А          | Reducing  | А          |  |
| 8. Stability in gentle spirals - 4.4.8              |                                     | ricodoling   | A          | Treadenig   |            |  |
|   |                                     | Spontaneous exit   | А          | Spontaneous exit  | А          |  |
| Tendency to return to straight flight               |                                     |  | A          | Spontaneous exit  | A          |  |
| 9. Behaviour exiting a fully developed spiral div   | ve - 4.4.                           | Immediate reduction of rate in turn                      |            |   |            |  |
| Tendency to return to straight flight               | ial response of glider (first 180°) |  | A          | Immediate reduction of rate in turn<br>Spontaneous exit | A          |  |
| Turn angle to recover normal flight                 |                                     | Spontaneous exit<br>Less than 720°, spontaneous recovery | A          | Less than 720°, spontaneous recovery                    | A          |  |
| ° °   |                                     | Less than 720, spontalleous recovery                     | ~          | Less than 720, spontaneous recovery                     | ~          |  |
| 10. Symmetric front collapse - 4.4.10               |                                     | L  |            |   | -          |  |
| Folding lines used                                  |                                     | No<br>Rocking back less than 45°                         | Δ.         | No<br>Rocking back less than 45°                        | Δ.         |  |
| Entry<br>Recovery                                   | ~ 30%                               | Spontaneous in less than 3 sec                           | A          | Spontaneous in less than 3 sec                          | A          |  |
| ,   | paa                                 |  |            | •   |            |  |
| Dive forward angle on exit                          | trim speed                          | 0° - 30° Keeping course                                  | A          | 30° - 60° Keeping course                                | В          |  |
| Cascade occurs                                      |                                     | No   | A          | No  | A          |  |
| Entry   | > 50%                               | Rocking back less than 45°                               | A          | Rocking back less than 45°                              | A          |  |
| Recovery  |                                     | Spontaneous in less than 3 sec                           | A          | Spontaneous in less than 3 sec                          | A          |  |
| Dive forward angle on exit                          | paads u                             | 0° - 30° Keeping course                                  | А          | 30° - 60° Keeping course                                | В          |  |
| Cascade occurs                                      | trim                                | No   | A          | No  | Ā          |  |
| Entry   | %0                                  | Rocking back less than 45°                               | A          | Rocking back less than 45°                              | A          |  |
| Recovery  | accelerated > 50%                   | Spontaneous in less than 3 sec                           | А          | Spontaneous in less than 3 sec                          | А          |  |
| Dive forward angle on exit                          | celen                               | 30° - 60° Keeping course                                 | В          | 30° - 60° Keeping course                                | В          |  |
| Cascade occurs                                      | ac                                  | No   | A          | No  | A          |  |
| 11. Exiting deep stall (parachutal stall) - 4.4.11  |                                     |  |            |   |            |  |
| Deep stall achieved                                 |                                     | Yes  |            | Yes   |            |  |
| Recovery  | ecovery                             |  | А          | Spontaneous in less than 3 sec                          | А          |  |
| Dive forward angle on exit                          |                                     | 0° - 30°   | A          | 0° - 30°  | A          |  |
| Change of course                                    |                                     | Changing course less than 45°                            | A          | Changing course less than 45° A<br>No A                 |            |  |
| Cascade occurs                                      |                                     | No   | A          | No  |            |  |

| 12. High angle of attack recovery - 4.4.12  |                                  |   |                    |           |                          |                                   |   |           |    |
|---|----------------------------------|---|--------------------|-----------|--------------------------|-----------------------------------|---|-----------|----|
| Recovery  |                                  | Spontaneous in less than 3 sec                |                    |           | А                        | Spontaneous in                    | А   |           |    |
| Cascade occurs  | No                               |   |                    | A         | No                       | A                                 |   |           |    |
| 13. Recovery from a developed full stall - 4.4.1  |                                  |   |                    |           |                          |                                   |   |           |    |
| Dive forward angle on exit<br>Collapse  | 30° - 60°<br>No collapse         |   |                    | B         | 30° - 60°<br>No collapse | B                                 |   |           |    |
| Cascade occurs (other than collapse)  | No                               |   |                    | А         | No                       | А                                 |   |           |    |
| Rocking backward<br>Line tension  |                                  | Less than 45°<br>Most lines tight             |                    |           | A                        | Less than 45°<br>Most lines tight | A   |           |    |
| 14. Asymmetric collapse (trim speed) - 4.4.14   |                                  |   |                    |           |                          |                                   |   |           |    |
| Folding lines used  | 1                                | No  |                    |           |                          | No                                | T   | 1         |    |
| Change of course until re-inflation   | se                               | < 90°   | Dive or roll angle | 15° - 45° | А                        | < 90°                             | Dive or roll angle                            | 15° - 45° | А  |
| Re-inflation behavior   | trim speed,<br>max 50% collapse  | Spontaneous re                                | -inflation         |           | А                        | Spontaneous re                    | -inflation                                    |           | А  |
| Total change of course  | trim speed<br>x 50% colls        | Less than 360°                                |                    |           | А                        | Less than 360°                    |   |           | А  |
| Collapse on the opposite side occurs<br>Twist occurs  | tri<br>nax {                     | No<br>No                                      |                    |           | A                        | No<br>No                          |   |           | A  |
| Cascade occurs  |                                  | No  |                    | 1         | A                        | No                                | 1   |           | A  |
| Change of course until re-inflation   | se                               | 90° - 180°                                    | Dive or roll angle | 15° - 45° | В                        | 90° - 180°                        | Dive or roll angle                            | 15° - 45° | В  |
| Re-inflation behavior   | trim speed,<br>max 75% collapse  | Spontaneous re                                | -inflation         |           | А                        | Spontaneous re                    | -inflation                                    |           | А  |
| Total change of course  | n speed,<br>5% colla             | Less than 360°<br>No<br>No<br>No              |                    |           | A                        | Less than 360°<br>No<br>No        |   |           | A  |
| Collapse on the opposite side occurs  | trim<br>1ax 75                   |   |                    |           | A                        |                                   |   |           | A  |
| Twist occurs<br>Cascade occurs  | E                                |   |                    |           | A<br>A                   | No<br>No                          |   |           |    |
| Change of course until re-inflation   |                                  | < 90°   | Dive or roll angle | 15° - 45° | А                        | < 90°                             | Dive or roll angle                            | 15° - 45° | А  |
|   | d,<br>apse                       |   |                    | 10 - 40   |                          |                                   |   | 10 - 40   |    |
| Re-inflation behavior   | accelerated,<br>max 50% collapse | Spontaneous re                                | -inflation         |           | A                        | Spontaneous re-inflation          |   |           | A  |
| Total change of course<br>Collapse on the opposite side occurs  | accel<br>< 50%                   | Less than 360°<br>No                          |                    |           | A                        | Less than 360°<br>No              |   |           | A  |
| Twist occurs  | max                              | No  |                    |           | А                        | No                                |   |           | А  |
| Cascade occurs  |                                  | No  |                    |           | A                        | No                                |   |           | A  |
| Change of course until re-inflation   | ,<br>bse                         | 90° - 180°                                    | Dive or roll angle | 15° - 45° | В                        | 90° - 180°                        | Dive or roll angle                            | 15° - 45° | В  |
| Re-inflation behavior   | accelerated,<br>max 75% collapse | Spontaneous re                                | -inflation         |           | А                        | Spontaneous re                    | -inflation                                    |           | А  |
| Total change of course  | ccele<br>75%                     | Less than 360°                                |                    |           | A                        | Less than 360°                    | A   |           |    |
| Collapse on the opposite side occurs<br>Twist occurs  | a                                | No<br>No                                      |                    |           | A                        | No<br>No                          |   |           | A  |
| Cascade occurs  |                                  | No  |                    |           | А                        | No                                |   |           | A  |
| 15. Directional control with a maintained asymptotic<br>Able to keep course straight                                | netric co                        | llapse - 4.4.15<br>Yes                        |                    |           | A                        | Yes                               |   |           | А  |
|   | Yes                              |   |                    | A         | Yes                      |                                   |   | A         |    |
| 180° turn away from the collapsed side possible in 10 sec<br>Amount of control range between turn and stall or spin |                                  | More than 50% of the symmetric control travel |                    |           | A                        |                                   | More than 50% of the symmetric control travel |           |    |
| 16. Trim speed spin tendency - 4.4.16   |                                  |   |                    |           |                          | A                                 |   |           |    |
| Spin occurs   |                                  | No  |                    |           | А                        | No                                |   |           | А  |
| 17. Low speed spin tendency - 4.4.17<br>Spin occurs   |                                  | No  |                    |           | А                        | No                                |   |           | А  |
| 18. Recovery from a developed spin - 4.4.18   |                                  | -   |                    |           |                          |                                   |   |           |    |
| Spin rotation angle after release   | Stops spinning in less than 90°  |   |                    | А         | Stops spinning i         | А                                 |   |           |    |
| Cascade occurs  |                                  |   | No                 |           |                          | No                                | А   |           |    |
| 19. B-line-stall - 4.4.19   |                                  | •   |                    |           |                          |                                   |   |           |    |
| Change of course before release   |                                  | Changing course less than 45°                 |                    |           | A                        | Changing course                   | A   |           |    |
| Behaviour before release  |                                  | Remains stable with straight span             |                    |           | A                        | Remains stable                    | A   |           |    |
| Recovery  |                                  | Spontaneous in less than 3 sec                |                    |           | А                        | Spontaneous in                    | А   |           |    |
| Dive forward angle on exit<br>Cascade occurs  |                                  | 0° - 30°                                      |                    |           | A                        | 0° - 30°<br>No                    | A   |           |    |
| 20. Big ears - 4.4.20   |                                  | No  |                    |           | A                        | No                                |   |           | A  |
| Entry procedure Special device required   |                                  |   |                    |           | А                        | Special device r                  | А   |           |    |
| Behaviour during big ears   | Stable flight                    |   |                    | A         | Stable flight            | A                                 |   |           |    |
| Recovery  |                                  | Spontaneous in less than 3 sec                |                    |           | A                        | Spontaneous in                    | A   |           |    |
| Dive forward angle on exit  |                                  | 0° - 30°                                      |                    |           | A                        | 0° bis 30°                        | A   |           |    |
| 21. Big Ears in accelerated flight - 4.4.21   |                                  |   |                    |           |                          |                                   |   |           |    |
| Entry procedure   |                                  | Special device required                       |                    |           | А                        | Special device r                  | А   |           |    |
| Behaviour during big ears   |                                  | Stable flight                                 |                    |           | A                        | Stable flight                     | A   |           |    |
| Recovery  |                                  | Spontaneous in less than 3 sec                |                    |           | А                        | Spontaneous in                    | А   |           |    |
| Dive forward angle on exit  |                                  | 0° - 30°                                      |                    |           | A                        | 0° bis 30°                        | A   |           |    |
| Behaviour immediately after releasing the accelarator while<br>maintaining big ears                                 |                                  | Stable flight                                 |                    |           | А                        | Stable flight                     | А   |           |    |
| 23. Alternative means of directional control - 4  | .4.22                            |   |                    |           |                          |                                   |   |           |    |
| 180° turn achievable in 20 sec Yes  |                                  |   |                    |           | А                        | Yes                               |   |           | А  |
| Stall or spin occurs  |                                  | No  |                    |           | A                        | No                                |   |           | A  |
| 23. Any other flight procedure and/or configura   | ation des                        | cribed in the use                             | r's manual - 4.4.  | 23        |                          |                                   |   |           |    |
| Procedure works as descibed<br>Procedure suitable for novice pilots   |                                  |   |                    | NA<br>NA  |                          | NA<br>NA                          |   |           |    |
| Cascade occurs  |                                  |   |                    |           | NA                       |                                   |   |           | NA |
| 24. Remarks of testpilot:   |                                  |   |                    |           |                          |                                   |   |           |    |
| l   |                                  | L   |                    |           |                          | L                                 |   |           |    |