## FTR - Flight Test Report Dieser Prüfbericht darf ohne schriftliche Zustimmung der EAPR nicht, auch nic

| Manufacturer |  | Type testing No. | EAPR-GS-0577/17 | JE LOS   |
|--------------|--|------------------|-----------------|--|
|              | UP International<br>Kreuzeckbahnstraße 7<br>D-82462 Garmisch-Partenkirchen | serial number    | Proto           | Messen   Prüfen   Bewerten<br>Rev. 2.3 - 26.11.2014          |
| Model        | Summit XC-4 L  | Location         | Stubaital       | EAPR GmbH - Marktstr. 11<br>D-87730 Bad Grönenbach - Germany |
| Comment      |  | Location         | Kössen          |  |

ise, vervielfältigt werden

| Date of testing        | 16.01.2017 | Minimum take o<br>100 kg | •  | Maximum take off weight<br>130 kg |       |  |
|------------------------|------------|--------------------------|----|-----------------------------------|-------|--|
| Testpilot              |            | Pascal Purin             |    | Anselm Rauh                       |       |  |
| Harness                |            | EAPR Testequipment       |    | EAPR                              | A CAR |  |
| Pilot's take off weigl | nt         | 100                      | kg | 128                               | kg    |  |

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



| Test-criteria                                       |             | Minimum take off weight                   | Evaluation | Maximum take off weight              | Evaluatio |
|---|-------------|---|------------|--------------------------------------|-----------|
| 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                                   |            | No                                   | А         |
| 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                                  | A         |
| Speed range using the controls larger than 10km/    | h           | Yes                                       | A          | Yes                                  | A         |
|   |             |   |            |                                      |           |
| Minimum speed                                       |             | Less than 25 km/h                         | A          | Less than 25 km/h                    | A         |
| 4. Control movement - 4.4.4                         |             | -1  |            |                                      |           |
| Max. weight in flight up to 80kg                    |             |   | -          |                                      | -         |
| Max. weight in flight 80 to 100kg                   |             |   | -          |                                      | -         |
| Max. weight in flight greater than 100kg            |             | Increasing >65 cm                         | А          | Increasing >65 cm                    | А         |
| 5. Pitch stability exiting accelerated flight - 4.4 | 4.5         | •   |            |                                      |           |
| Dive forward angle on exit                          |             | Dive forward less than 30°                | А          | Dive forward less than 30°           | A         |
| Collapse occurs                                     |             | No  | A          | No                                   | A         |
| 6. Pitch stability operating controls during acc    | celerated   | 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              |             | neducing                                  | A          | Reducing                             | A         |
|   |             | Our design of the                         |            | Output to a literative sector of the |           |
| Tendency to return to straight flight               |             | Spontaneous exit                          | A          | Spontaneous exit                     | A         |
| 9. Behaviour exiting a fully developed spiral d     | ive - 4.4.  |   |            |                                      |           |
| Initial response of glider (first 180°)             |             | No immediate reaction                     | В          | No immediate reaction                | В         |
| Tendency to return to straight flight               |             | Spontaneous exit                          | A          | Spontaneous exit                     | A         |
| Turn angle to recover normal flight                 |             | 720° to 1080°, spontaneous recovery       | В          | 720° to 1080°, spontaneous recovery  | В         |
| 10. Symmetric front collapse - 4.4.10               |             |   |            |                                      |           |
| Folding lines used                                  |             | No  |            | No                                   |           |
| Entry   | ~ 30%       | Rocking back less than 45°                | A          | Rocking back less than 45°           | A         |
| Recovery  | speed ~ 3   | Spontaneous in less than 3 sec            | А          | Spontaneous in less than 3 sec       | А         |
| Dive forward angle on exit                          | Lim sp      | 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  | scheed >5   | Spontaneous in less than 3 sec            | А          | Spontaneous in less than 3 sec       | А         |
| Dive forward angle on exit                          |             | 0° - 30° Keeping course                   | A          | 0° - 30° Keeping course              | A         |
| Cascade occurs                                      | tria        | No  | А          | No                                   | А         |
| Entry   | 50%         | Rocking back less than 45°                | A          | Rocking back less than 45°           | A         |
| Recovery  |             | Spontaneous in less than 3 sec            | А          | Spontaneous in 3 to 5 sec            | В         |
| Dive forward angle on exit                          | accelerated | 30° - 60° Keeping course                  | В          | 0° - 30° Keeping course              | А         |
| Cascade occurs                                      | acc         | No  | A          | No                                   | А         |
| 11. Exiting deep stall (parachutal stall) - 4.4.1   | 1           |   |            |                                      |           |
| Deep stall achieved                                 |             | Yes                                       |            | Yes                                  |           |
| Recovery  |             | Spontaneous in less than 3 sec            | А          | Spontaneous in less than 3 sec       | А         |
|   |             |   | А          | 0° - 30°                             | А         |
| Dive forward angle on exit                          |             | 0° - 30°                                  |            |                                      |           |
| Dive forward angle on exit<br>Change of course      |             | 0° - 30°<br>Changing course less than 45° | A          | Changing course less than 45°        | A         |

| 12. High angle of attack recovery - 4.4.12  |                                  |  |   |                   |  |  |   |                   |  |
|---|----------------------------------|--|---|-------------------|--|--|---|-------------------|--|
| Recovery  | Spontaneous in less than 3 sec   |  |   | А                 | Spontaneous in less than 3 sec   |  |   | A                 |  |
| Cascade occurs  | •                                |  |   | A                 | No   | 1033 11111 0 300   |   | A                 |  |
| 13. Recovery from a developed full stall - 4.4.1  | 13                               | No   |   |                   | A  | NO   |   |                   | A  |
| Dive forward angle on exit  |                                  | 30° - 60°  |   |                   | В  | 30° - 60°  |   |                   | В  |
| Collapse  |                                  | No collapse  |   |                   | A  | No collapse  |   |                   | A  |
| Cascade occurs (other than collapse)<br>Rocking backward  |                                  | No<br>Less than 45°  |   |                   | A  | No<br>Less than 45°  |   |                   | A  |
| Line tension  |                                  | Most lines tight   |   |                   | A  | Most lines tight   |   |                   | A  |
| 14. Asymmetric collapse (trim speed) - 4.4.14   |                                  | -  |   |                   |  |  |   |                   |  |
| Folding lines used  | 1                                | No   |   |                   |  | No   | 1   |                   |  |
| Change of course until re-inflation   | Se                               | < 90°  | Dive or roll angle  | 15° - 45°         | A  | < 90°  | Dive or roll angle  | 15° - 45°         | A  |
| Re-inflation behavior   | trim speed,<br>max 50% collapse  | Spontaneous re-  | inflation   |                   | А  | Spontaneous re   | -inflation  |                   | А  |
| Total change of course  | trim speed<br>< 50% colla        | Less than 360°   |   | A                 | Less than 360°   |  |   | A                 |  |
| Collapse on the opposite side occurs  | Tax 5                            | No<br>No   |   | A                 | No   |  | A   |                   |  |
| Twist occurs Cascade occurs   | -                                | No   |   |                   | A  | No<br>No   |   |                   | <u>A</u>   |
| Change of course until re-inflation   | 0                                | 90° - 180°   | Dive or roll angle  | 15° - 45°         | В  | 90° - 180°   | Dive or roll angle  | 15° - 45°         | В  |
|   | trim speed,<br>max 75% collapse  |  |   |                   |  |  | l   |                   |  |
| Re-inflation behavior   | beec<br>col                      | Spontaneous re-  | inflation   |                   | A  | Spontaneous re   | -inflation  |                   | A  |
| Total change of course<br>Collapse on the opposite side occurs  | trim speed<br>< 75% colls        | Less than 360°   |   | A                 | Less than 360°<br>No   |  |   | <u>A</u>          |  |
| Twist occurs  | max t                            | No<br>No   |   |                   | A  | No   |   |                   | A  |
| Cascade occurs  |                                  | No   |   |                   | А  | No   |   |                   | А  |
| Change of course until re-inflation   | ~                                | < 90°  | Dive or roll angle  | 15° - 45°         | А  | < 90°  | Dive or roll angle  | 15° - 45°         | А  |
| -   | accelerated,<br>max 50% collapse |  |   |                   |  |  | 1.0.1.  |                   |  |
| Re-inflation behavior   | erate<br>6 coll                  | Spontaneous re-  | Inflation   |                   | A  | Spontaneous re-inflation   |   |                   | A  |
| Total change of course<br>Collapse on the opposite side occurs  | accelerated<br>x 50% colla       | Less than 360°<br>No   |   |                   | A  | Less than 360°<br>No   |   |                   | A  |
| Twist occurs  | a<br>max                         | No   |   |                   | A  | No   |   |                   | A  |
| Cascade occurs  |                                  | No   |   |                   | A  | No   |   |                   | А  |
| Change of course until re-inflation   | e<br>e                           | 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  | elera<br>5% ci                   | Less than 360°   |   |                   | A  | Less than 360°   |   |                   | A  |
| Collapse on the opposite side occurs  | aco<br>ax 75                     | No   |   |                   | А  | No   |   |                   | А  |
| Twist occurs<br>Cascade occurs  | Ë                                | No<br>No   |   |                   | A  | No<br>No   |   |                   | <u>A</u>   |
| 15. Directional control with a maintained asymm   | metric col                       |  |   |                   |  | 140  |   |                   | A  |
| Able to keep course straight  |                                  | Yes  |   |                   | A  | Yes  |   |                   | А  |
| 180° turn away from the collapsed side possible in  | 10 sec                           | Yes  |   |                   | А  | Yes  |   |                   | А  |
| Amount of control young lockup on the ordered shall on a  |                                  | Mare then 500/   | faha aumontia a   | antical travel    | A  | More than 50% of the symmetric control travel  |   |                   | A  |
| Amount of control range between turn and stall or s   | spin                             | wore than 50% c  | of the symmetric c  | onition traver    | A  | More than 50%  | or the symmetric c  | ontroi traver     | A  |
| 16. Trim speed spin tendency - 4.4.16<br>Spin occurs  |                                  | No   |   |                   |  | No   |   |                   |  |
|   |                                  |  |   |                   | A  | INU  |   |                   | ٨  |
|   |                                  | 110  |   |                   |  |  |   |                   | А  |
| 17. Low speed spin tendency - 4.4.17<br>Spin occurs   |                                  | No   |   |                   | A  | No   |   |                   | A  |
| 17. Low speed spin tendency - 4.4.17  |                                  |  |   |                   |  | No   |   |                   |  |
| 17. Low speed spin tendency - 4.4.17<br>Spin occurs   |                                  |  | less than 90°   |                   |  | No<br>Stops spinning in  | n less than 90°   |                   |  |
| 17. Low speed spin tendency - 4.4.17<br>Spin occurs<br>18. Recovery from a developed spin - 4.4.18  |                                  | No   | less than 90°   |                   | A  |  | n less than 90°   |                   | A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release  |                                  | No<br>Stops spinning in  | I less than 90°   |                   | A  | Stops spinning in  | n less than 90°   |                   | A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs   |                                  | No<br>Stops spinning in  |   |                   | A  | Stops spinning in  |   |                   | A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19   |                                  | No<br>Stops spinning in<br>No<br>Changing course   |   |                   | A<br>A<br>A  | Stops spinning in<br>No<br>Changing course   |   |                   | A<br>A<br>A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release  |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v   | less than 45°<br>with straight span   |                   | A<br>A<br>A  | Stops spinning i<br>No<br>Changing course<br>Remains stable  | e less than 45°<br>with straight span   |                   | A<br>A<br>A<br>A   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v<br>Spontaneous in I   | less than 45°<br>with straight span   |                   | A<br>A<br>A<br>A<br>A<br>A   | Stops spinning in<br>No<br>Changing course   | e less than 45°<br>with straight span   |                   | A<br>A<br>A<br>A<br>A<br>A   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v   | less than 45°<br>with straight span   |                   | A<br>A<br>A<br>A   | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in   | e less than 45°<br>with straight span   |                   | A<br>A<br>A<br>A<br>A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit  |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable w<br>Spontaneous in h<br>0° - 30°   | less than 45°<br>with straight span   |                   | A<br>A<br>A<br>A<br>A<br>A   | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°   | e less than 45°<br>with straight span   |                   | A<br>A<br>A<br>A<br>A<br>A<br>A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable w<br>Spontaneous in h<br>0° - 30°   | less than 45°<br>with straight span<br>ess than 3 sec   |                   | A<br>A<br>A<br>A<br>A<br>A   | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°   | e less than 45°<br>with straight span<br>less than 3 sec  |                   | A<br>A<br>A<br>A<br>A<br>A<br>A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v<br>Spontaneous in I<br>0° - 30°<br>No<br>Standard techniq<br>Stable flight  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue   |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A   | Stops spinning i<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight   | e less than 45°<br>with straight span<br>less than 3 sec<br>equired                                     |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v<br>Spontaneous in I<br>0° - 30°<br>No<br>Standard techniq<br>Stable flight<br>Recovery throug   | less than 45°<br>with straight span<br>ess than 3 sec   | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A   | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug   | e less than 45°<br>with straight span<br>less than 3 sec  | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Charge of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v<br>Spontaneous in I<br>0° - 30°<br>No<br>Standard techniq<br>Stable flight  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue   | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A   | Stops spinning i<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight   | e less than 45°<br>with straight span<br>less than 3 sec<br>equired                                     | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A  |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery  |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v<br>Spontaneous in I<br>0° - 30°<br>No<br>Standard techniq<br>Stable flight<br>Recovery throug<br>3 sec  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue   | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B   | Stops spinning i<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec   | e less than 45°<br>with straight span<br>less than 3 sec<br>equired                                     | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v<br>Spontaneous in I<br>0° - 30°<br>No<br>Standard techniq<br>Stable flight<br>Recovery throug<br>3 sec  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B   | Stops spinning i<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec   | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le            | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21   |                                  | No<br>Stops spinning in<br>No<br>Changing course<br>Remains stable v<br>Spontaneous in I<br>0° - 30°<br>No<br>Standard techniq<br>Stable flight<br>Recovery throug<br>3 sec<br>0° - 30°  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A  | Stops spinning i<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°   | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le            | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery  |                                  | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Standard techniq Stable flight Recovery throug Standard techniq   | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A  | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug  | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le            |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A   |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery  |                                  | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug 3 sec 0° - 30° Standard techniq Stable flight   | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>B<br>A<br>B<br>B<br>A<br>B           | Stops spinning ii<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec                                       | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>B<br>B<br>A<br>B<br>B           |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelare   | ator while                       | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Sec 0° - 30° Standard techniq Stable flight Recovery throug Standard techniq Stable flight Recovery throug Standard techniq Stable flight Recovery throug Sec 0° - 30°  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A | Stops spinning i<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°                          | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelara  |                                  | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Sec 0° - 30° Standard techniq Stable flight Recovery throug Stable flight Stable flight Stable flight Recovery throug Stable flight Recovery throug Stable flight Stable flight Stable flight Stable flight Recovery throug Stable flight S | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>B<br>A<br>B<br>B<br>A<br>B           | Stops spinning i<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec  | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>B<br>B<br>A<br>B<br>B           |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         28. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelare maintaining big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit   |                                  | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° Standard techniq Stable flight Recovery throug 3 sec 0° - 30° Standard techniq Stable flight Changing sec 0° - 30° Stable flight  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A      | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Stable flight        | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelara  |                                  | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° Standard techniq Stable flight Recovery throug 3 sec 0° - 30° Standard techniq Stable flight Recovery throug 3 sec 0° - 30° Stable flight Yes   | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le                               |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Stable flight<br>Yes | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelara maintaining big ears         23. Alternative means of directional control - 4  | 1.4.22                           | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Sec 0° - 30° Standard techniq Stable flight Recovery throug Stable flight Recovery throug Sec 0° - 30° Stable flight Ne Yes No  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le<br>ue<br>h pilot action in le | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A      | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Stable flight        | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A      |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelare         maintaining big ears         23. Alternative means of directional control - 4         180° turn achievable in 20 sec  | 1.4.22                           | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Sec 0° - 30° Standard techniq Stable flight Recovery throug Stable flight Recovery throug Sec 0° - 30° Stable flight Ne Yes No  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le<br>ue<br>h pilot action in le | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Stable flight<br>Yes | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelara maintaining big ears         23. Alternative means of directional control - 4  | 1.4.22                           | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Sec 0° - 30° Standard techniq Stable flight Recovery throug Stable flight Recovery throug Sec 0° - 30° Stable flight Ne Yes No  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le<br>ue<br>h pilot action in le | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A           | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Stable flight<br>Yes | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A      |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour immediately after releasing the accelare maintaining big ears         Recovery         Dive forward angle on exit         Behaviour immediately after releasing the accelare maintaining big ears         23. Alternative means of directional control - 4         180° turn achievable in 20 sec         Stall or spin occurs         23. Any other flight procedure and/or configura         Procedure wsita | 1.4.22                           | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Sec 0° - 30° Standard techniq Stable flight Recovery throug Stable flight Recovery throug Sec 0° - 30° Stable flight Ne Yes No  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le<br>ue<br>h pilot action in le | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Stable flight<br>Yes | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>B<br>A<br>A<br>A<br>A |
| 17. Low speed spin tendency - 4.4.17         Spin occurs         18. Recovery from a developed spin - 4.4.18         Spin rotation angle after release         Cascade occurs         19. B-line-stall - 4.4.19         Change of course before release         Behaviour before release         Recovery         Dive forward angle on exit         Cascade occurs         20. Big ears - 4.4.20         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         21. Big Ears in accelerated flight - 4.4.21         Entry procedure         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during big ears         Recovery         Dive forward angle on exit         Behaviour during bi   | 1.4.22                           | No Stops spinning in No Changing course Remains stable v Spontaneous in I 0° - 30° No Standard techniq Stable flight Recovery throug Sec 0° - 30° Standard techniq Stable flight Recovery throug Stable flight Recovery throug Sec 0° - 30° Stable flight Ne Yes No  | less than 45°<br>with straight span<br>ess than 3 sec<br>ue<br>h pilot action in le<br>ue<br>h pilot action in le | ss than a further | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A | Stops spinning in<br>No<br>Changing course<br>Remains stable<br>Spontaneous in<br>0° - 30°<br>No<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Special device r<br>Stable flight<br>Recovery throug<br>3 sec<br>0° bis 30°<br>Stable flight<br>Yes | e less than 45°<br>with straight span<br>less than 3 sec<br>equired<br>gh pilot action in le<br>equired |                   | A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>B<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A |