

Grob
Twin Astir

Checklist
And
Quick Reference

Normal Procedures

Airspeeds For Normal Operations (mph)

	<u>Solo</u>	<u>Dual</u>
Best Glide ($V_{L/D}$)	<u>58</u>	<u>69</u>
Minimum Sink (V_{MS})	<u>46</u>	<u>56</u>
Maneuvering (V_A)	<u>105</u>	<u>105</u>
Never Exceed (V_{NE})	<u>155</u>	<u>155</u>
Stall (V_S)	<u>41</u>	<u>50</u>
Stall - Spoilers Open (V_{S1})	<u>47</u>	<u>56</u>
Max Speed - Spoilers Open	<u>155</u>	<u>155</u>
Maximum Aero Tow	<u>105</u>	<u>105</u>
Maximum Ground Launch	<u>74</u>	<u>74</u>
Minimum Pattern	<u>61</u>	<u>75</u>
Minimum Approach Speed	<u>54</u>	<u>65</u>
(Plus 1/2 kt for each 1 kt of wind)		

Preflight Checklist

COCKPIT

Required Documents In Aircraft
 Airworthiness Certificate
 Registration
 Operating Limitations (Placards, Instrument
 Markings, POH)
 Weight and Balance Information
Seats and Seat Cushions Adjust
Seat Ballast Correct
Rudder Pedal (front and rear) Adjust
Controls Free and Correct
Spoilers Free and Correct
Loose Objects Remove or Secure
Electrical Equipment Off
Altimeter Set
Battery Connect
Radio On and Tuned
Transponder (if installed).....On/1202
Wing Attachment Connect Secured and Checked
Control Connections Secure
Oxygen (if desired)..... On
FOR SOLO FLIGHT
Rear Seat Cushions Remove
Rear Seat Belt and Harness Secure
FOR ALL FLIGHTS
Canopy Closed and Latched

EXTERIOR

Left Wing

Leading Edge Check Condition
Underside of Wing Check Condition
Spoilers Check
Wing Tip Wheel Check
Aileron Check
Trailing Edge Check Condition

Empennage

Static Ports (if present) Check Condition
Underside of Tail Boom Check Condition
Rudder Gust Lock Remove
Pitot Tube Cover Remove
Total Energy Probe Check Condition
Tail Control Surfaces Check
Tail Wheel Check

Right Wing

Trailing Edge Check Condition
Aileron Check Condition
Wing Tip Wheel Check
Spoilers Check
Leading Edge Check Condition
Underside of Wing Check Condition

Fuselage

Main Wheel, Tire and Brake Check
Underside of Fuselage Check Condition
Nose Wheel Check
Tow Hook Check
Canopy Hinges and Latches Check
Canopy Clean

First Flight Of The Day

Positive Control Check Accomplish
Tow Rope Inspect
Tow Release Check
Main Brake Check

Before Takeoff (ABBCCCDDE)

Altimeters Set
Ballast If Required
Belts and Harnesses Secure and Adjusted
Controls
 Ailerons, Elevators Free and Correct
 Elevator Trim Set
Cable (Tow Rope) Check and Attach
Canopy Closed and Latched
Dive Brakes Closed and Locked
Direction (Wind)..... Checked
Emergency Procedures Review

Before Landing

(FUSTALL)

Wind Assess
Flaps Set
Undercarriage Down and Locked
Speed Min Pattern + 1/2 Wind Speed
Trim Set
Airbrakes Check and Hold
Look
 Traffic Pattern Look For Traffic
 Landing Area Clear
 Wind Indicators Check Direction
Land Adjust Pattern For Conditions

After Landing/Securing

Electric Equipment Off
Flight Log Filled Out
Spoilers.....Closed and Locked
Flight Controls..... Secured by Front Seat Belts
Battery Disconnected
Oxygen Off
Seat Ballast Installed, or Properly Stored
Pitot Tube Cover..... Installed
Rudder Lock Installed
Tie DownSawhorses Oriented Properly
Tie Down Secure and Tight All Three Points
Vents All Closed
Canopy Closed and Locked
Canopy Cover Installed
Leading Edges (all) Clean

Emergency Procedures

Spoiler Are Open

TowplaneFans Rudder

Towplane Emergency

SignalTowplane Displays Positive L-R Roll

GliderRelease Immediately

Note

For all in-flight emergencies, the most important pilot action is to maintain control of the aircraft.

Premature Termination of Tow (Rope Break)

Approach Airspeed ... Establish and Maintain

Landing AreaSelect

< 200' AGL Land Straight Ahead

> 200' AGL 180° Turn, Land Downwind

> 800' AGL Complete Pattern and Land

Tow Rope Release Pull

Land Checklist

Off Airport Landing

Suitable Field Select
Size
Shape
Slope
Surface Winds
Surface Condition
Surrounding Obstructions
Stock

Fly normal upwind next to field to assess.

Pattern ... Fly Without Reference to Altimeter

Final Approach Normal

Touchdown Minimum

Speed Brakes Apply Heavily

Glider Release Failure (Aero Tow)

Signal Move To Side and Rock Wings

When Towplane Releases

Land As Soon As Possible

Neither The Towplane Nor Glider Can Release

Signal Towplane Yaws Back and Forth

Tow Position Low Tow

Spoilers As Necessary

Touchdown Before Towplane

After The Towplane Touches Down

Brakes or Spoilers to Maintain Position