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Gliding Silently and Powerfully through Manoeuvres

Aerobatics with RC model gliders

Aerobatics with gliders is fantastic challenge. Even in the early days of gliding, individual manoeuvres were practised for flight safety reasons. This is about controlling the aeroplane in difficult situations and flight states.



Competitions at all levels are now popular around the world.

As an almost logical consequence, over the last few years and in some countries, aerobatics have also become established in model gliding, as aerobatics with silent gliders soon proved to have a very special fascination for model pilots and spectators. This wonderful model flying category is intentionally based closely on people-carrying gliding aerobatics which affects not only the sequence of figures and individual manoeuvres but also the appearance of the aircraft themselves. Even the tow, when model gliders are taken up to launching altitudes of 500 to 700 metres above ground with a motorised plane, hardly differs from that for full-size aircraft. At championships, the motor-towing plane is usually fitted with an altimeter that constantly transmits the altitude to both pilots via radio. These telemetry systems enable all gliders to start their

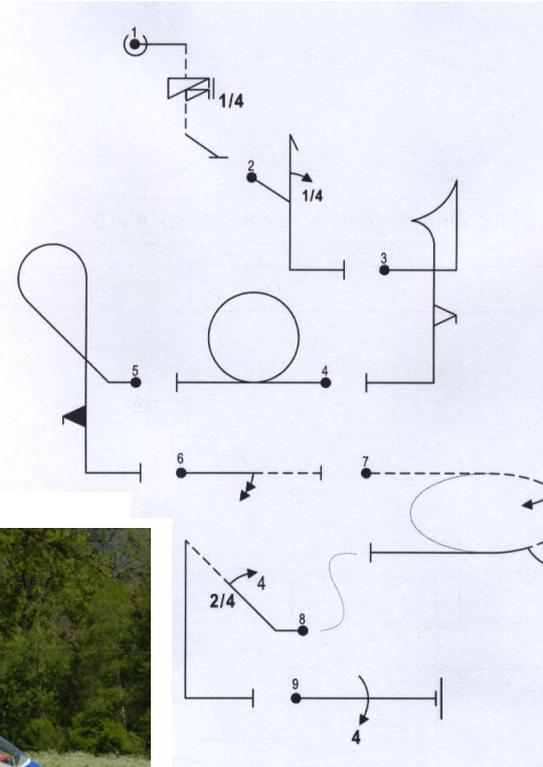
Later, more and more individual flight manoeuvres such as loops, turns and spins were performed and specially suited planes were even designed for gliding as an attractive aviation discipline.

Unlike those gliders designed for gliding and flying long distances, aerobatic gliders generally have a more compact shape and smaller but lower wings. This makes it easier to perform manoeuvres such as rolls and snaps.

programme of manoeuvres from the same initial altitude. Together with the airplane's mass, the altitude achieved in this manner provides the stored energy which, once the towing line is released from the motorised plane, makes it possible to fly an entire aerobatics programme without an engine.

Depending on the manoeuvre, the pilot accelerates his plane more or less powerfully during descents and one manoeuvre follows another to form a compact programme, until the glider finally reaches the ground and touches down to land. Most flights follow prescribed programmes of manoeuvres. Freestyle programmes are also very popular. They are individually put together by the competitors and usually accompanied by music. To enhance the show effect, competitors attach smoke cartridges to their models, for example at both wing tips.

Anyone able to observe a gliding aerobatics model elegantly and silently gliding through the manoeuvres to the accompaniment of atmospheric music will hardly be able to escape the fascination. I am certainly deeply impressed every time. If you ever get the chance to experience this fine flying sport somewhere – be it as a spectator or even as a pilot – you will agree with me. Good luck!



↑ **Drawing of aerobatic schedule for gliders**



↑ **Typical rc aerobatic glider**

Aero towing of gliders to start their manoeuvres from the same initial altitude ↓



Additional information

People-carrying gliders:
<http://www.fai.org/aerobatics>

Model gliders:
www.segelkunstflug-hummel.de