AS91522 - Physics 3.2

Circular Motion of a Stunt Glider

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Contents

1 Vertical Circle: Loop the loop including Dip and Arch

1.1 Achieved

During motion, 3 forces are acting on the stunt glider:

1. Gravity (F_g) (i.e. Weight) always vertically downwards (i.e. toward center of Earth).

2. Lift (F_L) perpendicular to direction of velocity, toward the center of the circular path.

3. Air Resistance (F_R) (i.e. Friction, Drag) opposite to direction of velocity.

For simplicity, air resistance will be ignored as its effects are negligible?
At the top of the loop, the light force has ma

1.2 Merit

1.3 Excellence

2 Banked Corner

2.1 Achieved

2.2 Merit

2.3 Excellence

3 Additional Info

3.1 Comprehensive Version History

Access to all prior versions of this document during process of creation is publicly available at:
`https://github.com/NathanTaskerPersonal/AS91522`

3.2 Graphical Analysis Files

Access to all graphical analysis files are publically available at:
middletonschoolnz-my.sharepoint.com/...

3.3 Bibliography