possibly   
communication?

**-**

Measure-ments

Signal  
Processing

Plane

Steering Signals

Control  
Structure

**-**

Trajectory

NED  
 Body

NED  
 Body

**-**

Acceleration

Trajectory

communication

Aerobatic Trajectory

Switch Signal

possibly   
communication?

**-**

Measure-ments

Signal  
Processing

Plane

Steering Signals

Control  
Structure

**-**

Trajectory

NED  
 Body

NED  
 Body

**-**

Acceleration

Trajectory

Measure-ments

Signal Processing:

phiThetaPsiDot = derivativeAngularRate( pqr, phiThetaPsi );  
pnPePdDot = derivativeVelocity( uvw, phiThetaPsi );  
groundSpeed = velocity( uvw );  
groundSpeedDot = acceleration ( uvw, uvwDot );

Control Structure

Throttle

PID

Aileron

PID

Elevator

PID

PID

Rudder

Control Structure

Throttle

PID

Aileron

PID

PID

Rudder

Elevator

PID

Switch Signal

Control for temporary aerobatic flight