



Andrew Wright grew up in Canada flying balsa wood control-line airplanes and blowing up model rockets. He became distracted by computers for many years, earned a PhD in computer science, and is now Chief Technology Officer for a cyber security company. Meanwhile, he acquired a taste for “big air” skiing the black diamond slopes of California and windsurfing the big waves of Maui. In 1996 he stepped into an airplane to earn his pilot’s license, but had a hard time controlling the urge to turn the airplane upside down. He began flying aerobatics shortly thereafter and bought a Giles 202 as his first airplane.

Andrew now calls Austin Texas home and has been flying competition aerobatics and airshows for 14 years. He has over 1000 hours of flight time in the Giles 202 gained through extensive participation in aerobatic competitions across the United States, where precision is everything. Bringing this experience to the airshow circuit, he flies digitally crisp maneuvers at speeds up to 250 mph and roll rates up to 500 degrees per second. The Giles 202 – or G202 for short – is an unlimited performance aerobatic aircraft and predecessor to the MX airplanes used in the Red Bull air races. The G202 is built entirely of carbon fiber, making it extremely light at 1000 pounds, and extremely strong with a load limit of plus or minus 10 G. This combination of lightness and strength enables the G202 to roll faster, corner harder, and fly more extreme maneuvers than most any other aircraft. Its superb flight characteristics have also made it a favorite of radio control enthusiasts.

During Andrew’s performance, you will see high speed rolls, vertical climbs of over 2000 feet, precise point rolls, micro loops, knife edge slides, hammerheads, flat spins, torque rolls, knife edge spins, tail slides, and indescribable tumbles. Andrew will take the aircraft to its limits, accelerating to 250 mph, pulling up to 9 positive G, and pushing up to 5 negative G, in order to show you what the G202 can do. Don’t expect to see him right side up very often!

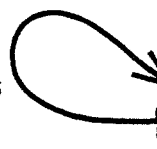
See great photos and videos of Andrew and the Carbon Fiber Airshows G202 at [CarbonFiberAirshows.com](http://CarbonFiberAirshows.com) and *like* Carbon Fiber Airshows on Facebook.

**Andrew Wright**

**Carbon Fiber Airshows**



120 kts



smoke on

inverted pass

**snap rolls**



2:00 to 2:30

Carbon Fiber Airshows .com facebook  
for videos, photos

**pinwheel**

1500

push  
3x4

**vertical  
rolls**

**quadruple  
lobotomy**

200  
180 kts

2500

**hammer**

200

**loop**

90 turn

**torque roll**

**4 point roll x 2+**

**triple end over end**

knife

1700  
300

**broken  
hammer**

100

**loop and a half**

**outside micro loop**

800  
85 kts

smoke off, climb, talk to crowd

2400



1300 **tail slide**

**knife edge spin  
flat spin**

1400

**vertical  
rolls**

**push  
humpty**

**double  
somersault**

1100  
85 kts

200

**knife edge climb**

**hammer** 1000

**knife edge, 4x4, knife edge**

100

200

**500° rolls**

**avalanche**

**180° inside turn**

**90° outside turn**



**outside  
snaps**

**photo pass on 500 foot line**

5:00 to 6:00

1:00 to 1:30

3:00 to 3:30

0:30

# **Inverted Flat Spin Talking Points**

inverted flat spin is an autorotation, upside down, with power on to raise the nose so that the airplane is flat, spinning around its center of gravity, falling

google “83 turn inverted flat spin” to see what one looks like from the cockpit

See bio for stuff about Andrew Wright

Current world record held by Spencer Superman at 81 turns from 23,000 feet in a Pitts S2B, set in March 2014. Previous world record was held by Wayne Handley at 78 turns from 16,000 feet in a G202, set in April 1999, and held for 15 years.

Andrew Wright will today attempt to set a new inverted flat spin world record in his Carbon Fiber Airshow G202 from 23,000 feet. He expects to achieve over 100 rotations. This will also be the first recorded inverted flat spin to exceed 100 rotations.

G202:

- 4 cylinder 238 HP Lycoming engine
- all carbon fiber monoplane
- 500 degrees / second roll rate
- 1000 lbs empty weight
- 1300 lbs takeoff weight for this spin
- 2.5 gallons smoke oil, not enough for entire spin

40 minutes to climb to 23,000 feet

3.5 minutes to spin down

Mt Everest is 29,000 feet, commercial jets typically fly 30,000 to 40,000 feet

5800 fpm descent rate (terminal velocity)

2 turns per second

6 turns per 1000 feet in lower altitudes, 5 turns per 1000 feet in upper  
starting recovery just below 3000 feet, requires 1000 to 1500 feet

pilot endures approx -2 G: combination of -1G for hanging upside down, -1.5 G being behind 4-5 feet behind center of rotation

pilot must hold full right rudder to maintain spin, without this G202 will fly out of spin on its own (not true for all airplanes!)

engine is running and near full power throughout entire spin

expecting over 100 rotations  
breathing oxygen

no control over horizontal drift in spin, depends on winds aloft, pilot tracks location by looking up (down) and GPS, must break off if drifting over crowd

air is thinner at higher altitudes, engine makes less power, wing generates less lift, propeller generates less thrust, so airplane climbs slower, falls faster

video and official results will be posted on [CarbonFiberAirshows.com](http://CarbonFiberAirshows.com) and Carbon Fiber Airshows on Facebook

follow Carbon Fiber Airshows on Facebook!