

World Aerobatic championship plane will make local debut

By Tara Marion

Designed specifically for flying at air shows and recognized for winning the World Aerobatic Championships, the Fujifilm Sukhoi SU-31 airplane, flown by Ian Groom, will demonstrate low-level, high-energy solo aerobatics—such as flips, somersaults and rolls—with a military-style technique at this year's High on America Air Show.

Groom's 14-minute performance will show the versatility of the SU-31 with stunts that differ from what any other aircraft in the world can do. For example, the SU-31 has a roll rate in excess of 400 degrees per second and a snap-roll rate of 720 degrees per second, which means it's rolling at two rolls per second. Groom will perform 20 consecutive snap rolls in 20 seconds.

"It's very light, very powerful, and it does things you wouldn't believe an airplane can do," Groom said.

His unbelievable stunts are partly attributed to the SU-31's lightweight construction due to space-age composites: Kevlar, titanium and stainless steel.

"It's the hottest, most powerful airplane in the world," Groom said. In fact, the SU-31 won the recent World Aerobatic championships.

Its power-to-weight ratio makes it maneuverable and fast. "We're doing 300 mph upside down and over the ground, so it's humming," Groom said.

The SU-31 also has a distinctive sound and smoke system. "Smoke comes out of the back of the airplane to make it look exciting," Groom said.

Many of Groom's stunts mimic the movements of everyday things. The Road Runner, for example, impersonates the cartoon character's decelerating stop and "Beep! Beep!" motion.

The Double Cobra Maneuver imitates the striking action of the cobra and does it twice.

In another maneuver, the Yo-Yo, Groom copies the movements of the childhood toy as he ascends and descends the SU-31 in a vertical line. "It will roll, flip and somersault, and do them all with great speed and great vertical penetration," Groom said.

Groom also incorporates music into a portion of his choreographed performance, which could be rock 'n' roll or even opera. Groom said he might perform part of his program to Rigoletto, a three-act opera by Giuseppe Verdi.

With the right precautions, training and maintenance, Groom's maneuvers are safe, and he has flown for years. In fact, he's been flying since he was 7-years old. When arriving for his High on America performance, he will be accompanied by his crew chief and another support person.

Groom is considered to be one of the most experienced Sukhoi pilots in the world, and his plane of choice is the US-31, although he has flown other SU models. He has performed and competed at the world championship level in the United States, United Kingdom, France, Germany, Holland, Italy, Austria and Japan.

Although he flies over 20 air shows a year, Groom said he's never flown at the High on America Air Show, and that he's looking forward to it. "I can't wait," he said. "It has a great reputation and a great museum. The guy that runs it, John Ellis, is a great aviator and a good friend."

Groom's demonstration is meant to appeal to families—kids, parents and grandparents alike—and Groom said that people who aren't interested in aviation will develop an interest after having seen his plane and demonstration. "It's very exciting to watch, and it's a great, great performer," he concluded.