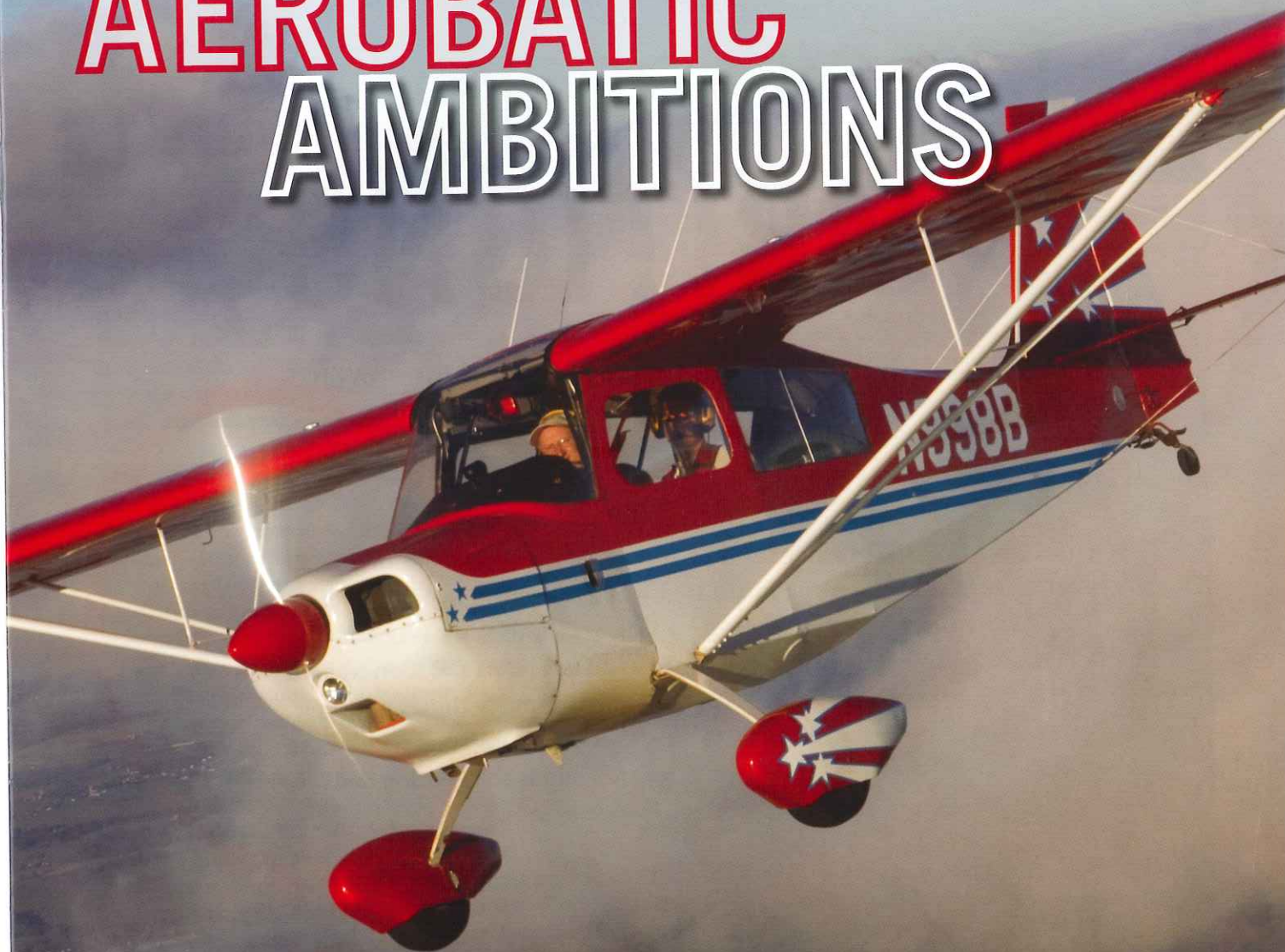


# AEROBATIC AMBITIONS



ADVANCE YOUR FLYING SKILLS WITH AEROBATICS





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VICKI CRUSE

**I**F YOU'VE WATCHED the air show at EAA AirVenture Oshkosh, or any air show across the country, you might find yourself saying, "I could never do that." While you might not be the next Sean Tucker or Patty Wagstaff, you should note that both these legends started as private pilots and soon realized the benefits of aerobatics training. Aerobatics means many things to people. For Sean and Patty, aerobatics means air shows and maneuvers such as the "Tucker Upper" or "Centrifuge." For others, aerobatics means competition and precision flying. For most pilots, aerobatics means loops and rolls.

People get started in aerobatics for a variety of reasons: Some have friends who've had aerobatic training who have influenced them, some want to learn more about their airplane, and some receive an aerobatic ride as a gift. Jenner Knight of San Diego, California, discovered aerobatics after his retirement from the airlines. "I was always fascinated by aerobatics. It's a third dimension to flight, and I always thought aerobatic pilots were the best pilots I've seen. I wanted to see how far I could go to improve my skills," he explained.

As for me, I bought an airplane I had no idea how to fly, a Christen Eagle II. I became interested in aerobatics because I was afraid to fly by myself. Four years after getting my pilot certificate—and with less than 20 hours of flight time during that four years—I sought

out Rich Stowell for some emergency maneuver training (EMT). Upon completion of the course, which included unusual attitudes and basic aerobatics, I had the confidence to fly by myself, and a love for aerobatics. I've never looked back.

## READY TO EXPAND YOUR ENVELOPE?

If your curiosity is the least bit piqued, the next step is to find a school that teaches basic aerobatics. There are many from which to choose (see [www.IAC.org/begin/schools.html](http://www.IAC.org/begin/schools.html)). Don't be cocky enough to think that you don't need professional instruction. One question I consistently hear during aerobatics presentations is, "Can I do basic aerobatics in my whiz-bang special?" I try to explain that anyone who wants to do "simple" aerobat-





Bonnie Kratz



LeeAnn Abrams

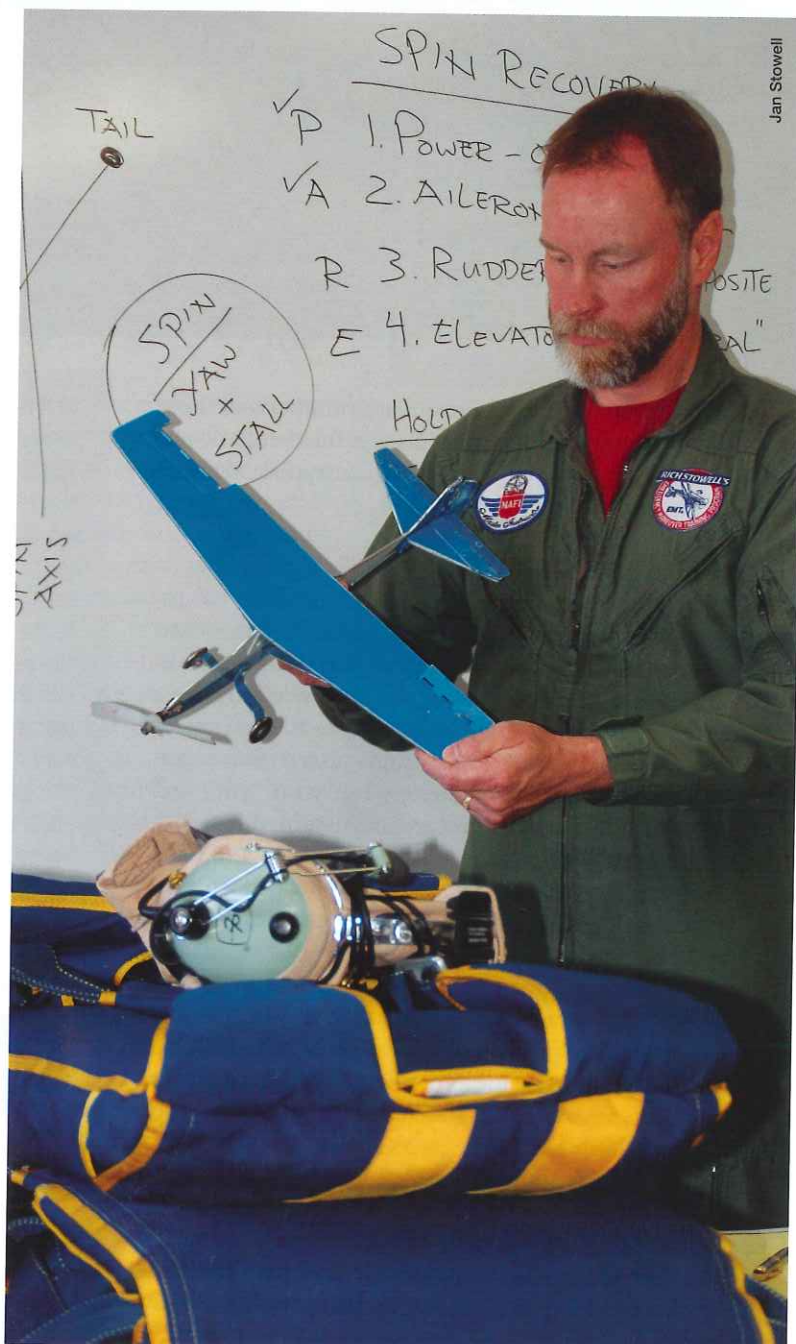
ics should get training in an aerobatic airplane with a flight instructor. Bottom line, it's a safe, controlled environment under the direction of someone whose plan is to be home for dinner.

What can you expect? First, anticipate a good cross-examination from the instructor before any flying begins. The instructor needs to know your previous flight experience and the types of airplanes you've flown. This is not the time to overextend yourself and brag about aerobatics you haven't done or the regulation-breaking aerobatics you have. Your instructor is going to quickly call your bluff when he or she figures out you have no idea how to find the correct rudder pedal. You should find yourself doing some "ground" work before you get in the airplane. This is a chance for you to understand what you are going to experience in the air and the principles behind the maneuvers. It's also a time to ask questions.

While you may be in a hurry to get in an airplane, good ground school lessons can make a big difference. Why waste a lot of money learning maneuver principles in the air when you could have learned them on the ground? A good instructor should go through the basic maneuvers with you, explaining how they are done, what they should look like, and the conditions you'll experience during them. There are three basic aerobatic maneuvers: spins, loops, and rolls. That's it. Most other maneuvers, such

**ABOVE: The Christen Eagle II (left) and the Pitts Model 12 (right) are both available in kit form and offer aerobatic capabilities.**

**RIGHT: Rich Stowell, a Master CFI in Ventura, California, specializes in spin, emergency maneuver, aerobatic, and tailwheel training.**



Jan Stowell





DeKevin Thorton

Aerobatic pilot Patty Wagstaff flies a thrilling routine in a Cirrus-sponsored Extra 300S at air shows around the world, but she started out as a private pilot in a Cessna 185 long before that.

as the Immelmann and half-Cuban, are variations of these three. The instructor should also discuss the aerobatic aircraft with you (flight speeds and pattern entry, for example) and will instruct you on parachute use.

### WHIZ-BANG VERSUS AEROBATIC AIRPLANE

Once you have an understanding of what you'll be doing, the next hurdle is the airplane. With the exception of a Cessna Aerobat, most aerobatic airplanes are tail-wheel aircraft. If you have no time in one, you're in for a treat! Don't let this detour you from the task. Ever notice how most of the vintage and warbird aircraft have tail-wheels? Tailwheel equals challenge, but your "cool factor" goes up a few notches. Getting accustomed to a tail-wheel takes some time, and if you were like me and have no real appreciation for rudder pedals, you will quickly realize their importance. Flying a tailwheel is an experience you *can* master.

Another common question is what airplane to use for the lessons. Sometimes you don't have a choice, particularly when a school has only one type of plane. Other times a school will have more than one type from which to choose. Let's assume that "Fred's Fantastic Flight School" has a variety of airplanes to rent—a Citabria, Super Decathlon, Pitts, and an Extra 300L. Which one do you choose? One obvious question is, how much money do you have? Generally, the flight instructor gets the same pay, no matter the airplane. Some people started out in the Extra 300L because it was the only plane available. Most people start out in something slower and less complex. A roll is a roll and a

### MARGO CHASE

Margo Chase of Los Angeles, California, grew up around airplanes. Margo's father is a pilot, but she learned to fly only recently. Margo, the owner of a creative design company, wanted to do something a little more fun, so she signed up for the EMT course at CP Aviation in Santa Paula, California, and began her training with NAFI Master Instructor Patrick Dugan in the Super Decathlon. Margo took the EMT course because she was working on her instrument rating, and while finding it challenging, she thought there had to be more to flying than just straight and level. She also wanted something to improve her skills in case something went wrong. "I never expected aerobatics to be like this," she said. "My primary instructors made spins seem like no-man's-land, something never to do. I am so glad I did this course."

Margo's problem now is she is hooked; she is enjoying the challenge of precision flying and the constant improvement to her skills and her confidence. She is also looking to buy a two-seat aerobatic airplane with partners.



Kate DeBaun





The two-place Pitts Special S-2B is ideal for advanced aerobatic instruction.

spin is a spin, be it in a Citabria or Extra 300L; aerodynamics doesn't know the difference.

It's not uncommon for people to buy an aerobatic airplane and have no previous experience in it. For those who don't own an airplane or want training in an aerobatic airplane, former U.S. Team coach and flight instructor Alan Geringer of Selma, California, recommends the Decathlon. "It's a great entry-level airplane without getting wild and crazy. It's also an excellent airplane to follow through with additional training other than just spins," he said. Alan also stresses the practicality of the Decathlon as a great airplane for an introduction to tailwheel training.

### WILL I NEED A SICSAK?

Most people, when faced with their first aerobatic flight, experience some anxiety along with the excitement of being able to fly. As a result, most training airplanes have well-placed SicSacs. This is also where a good instructor comes in. Your instructor should continually ask you how you are feeling and, if for any reason you feel the least bit queasy, you should tell the instructor immediately. Returning to the airport is nothing to be ashamed of, but you can use the common excuse "I have to use the bathroom." Anxiety-driven airsickness is certainly not something to be ashamed of; it happens to the best. Former U.S. Aerobatic Team member

Janet Fitze spent weeks returning from flights to make a mad dash to the restroom, but keeping in mind the benefits of training and her desire to improve her flying skills, she never gave up and kept coming back.

Your first lesson in an aerobatic airplane is usually shaped by what you want to accomplish. Some people want to jump right into unusual attitude and spin training. If this is the case, Judy Phelps, a National Association of Flight Instructors (NAFI) Master Instructor in aerobatics and the owner of CP Aviation, advises to start with the basics. "The first flight is a familiarization flight, understanding the flight controls and how they work independently and with each other," she said. "We do slow flight, turns, and a lot of stalls, and I begin to get students to look outside the airplane for references, not inside like they're used to."

For those who are unsure about aerobatics, Judy introduces them to the subject by talking to them on the ground about the maneuvers first. "Most people have no idea what they want to do," she explained. "Usually we do aileron rolls and loops with me showing them the maneuver, then having them do it. Some people immediately know they don't like it, while



Kate DeBaun

### RON VELKES

Ron Velkes is an attorney from South Africa who came to the United States in 1979. He started his private pilot training just one week before September 11, 2001, and, after encountering numerous problems with various instructors, finally got his certificate in 2004. Ron was a Sunday afternoon flier and quickly got bored. He flew to Santa Paula one Sunday and met Patrick Dugan, who, after talking to him, asked, "How safe a pilot are you?" Ron's reply was that he was flying to stay current but wanted to learn more. A former instructor suggested instrument training, but Ron had no desire to fly in the clouds.

Ron decided to take some aerobatic training to improve his skills, get over his fear of stalls, and be a safer pilot. Ron's stomach challenged him, but he kept coming back, recognizing there was something in this for him. After each lesson, he'd go home and his wife would notice how happy he was. "I never thought flying could be this much fun," he said.

Ron said he didn't think he'd be able to fly a Cessna 172 ever again. He didn't initially aspire to contest flying, but after attending the first one as a volunteer, he decided he'd rather be flying than watching. He's attended two competitions and continues to enjoy the challenge of aerobatics.



## JUDY MCCARTHY

Flying was something Judy McCarthy always dreamed of. As a kid, she and her family went to many air shows and she had aspirations of being a Blue Angel. She had a cousin who was a flight instructor and on visits to San Diego she'd beg him to take her flying. Life got in the way, and she put the flying dream on hold.

When Judy's husband passed away five years ago, she knew it was time to stop mourning and start flying. After trying a couple flight schools, Judy settled on one and the journey began. She found many friends and got her certificate in May 2005.



Judy Phelps

others want more. You have to be careful not to do too much on the first flight." Those pilots who come away enthused usually sign up for the EMT course and are on their way. "Some people are very timid and we go slow, while others just eat it up. Each lesson has to be tailored to the individual student because everyone is different," Judy said.

### SPINS ARE FUN

General aviation instructors generally don't teach how to handle spins; they teach how to avoid them. Pilots who seek more information on spins are the ones who want to conquer the fear and educate themselves. Will Allen, owner of Flipside Aerobatics in Seattle, Washington, said most people come to him for spin training for safety reasons. "They want more information on something they know

Judy felt that flying a tailwheel aircraft was part of the flying romance, so she earned her tailwheel endorsement. While completing her training, she got involved with the local Ninety-Nines chapter, which offered several pilot proficiency courses, one where Rich Stowell discussed emergency maneuver training.

Despite having her certificate, Judy realized there was much more to learn about flying than was provided in private pilot training. She decided to take the EMT course.

"I thought EMT would help prevent me from getting into trouble, or if I did I'd know how to get out of it," she explained. "I enjoyed the course, but I never expected to enjoy the aerobatic portion so much. I think stall/spin work should be mandatory training. Until you take this training, you have no idea how much you really don't know."

little about," Will explained. "I also get pilots who've been in an accidental spin, or think they have, and they want to experience it in an airplane with someone they trust." Will also said he gets a lot of business following stall/spin seminars. In the seminars, people fulfill their mental need for information but want to experience the flying aspect as well.

Spin training doesn't mean a pilot should go out and spin his Baron, but it should give him a much better ability to handle a spin or near-spin situation, say on base turn to final. Spin training should be done in an aerobatic airplane; this is what they were made for. Unusual attitude training is invaluable and gives a pilot more confidence to overcome such a situation and right the airplane. It also teaches pilots to look outside the airplane and get the cues needed with-



David Carlson





The Super Decathlon is a popular aerobatic training aircraft built by American Champion.

out focusing on the instruments. Your eyes can tell you much more quickly what is happening than several instruments combined.

#### WHERE DO I GO FROM HERE?

Once you've flown a number of hours with an aerobatics instructor, what do you do next? Determine your reason for learning aerobatics. Did you want to learn a few maneuvers to help your piloting skills, do you plan to fly aerobatics recreationally, or do you plan to take it to the competition level? If you wanted to build confidence in your flying skills and prepare yourself for an emergency, then take to the sky and remember what you've learned. If you plan to fly aerobatics on occasion, keep in mind that your instruction is over and you are on your own. Remember your own limitations and try to keep current by going up with an instructor occasionally, as you

should if you haven't flown straight and level in a while.

Something about aerobatics and the confidence it brings hooks people. Perhaps it's the challenge we find within ourselves to do something we never thought we could, as we begin to understand a realm that exists outside "normal" flight. We learn we aren't crazy risk-takers but people who want to know more. We learn not only something about airplanes and aerodynamics but also something about ourselves and what we thought were our limitations.

*Vicki Cruse is the president of the International Aerobatic Club. She is also a member of World Aerobatic Championships' U.S. Unlimited Aerobatic Team and is the 2007 U.S. Unlimited National Champion.*

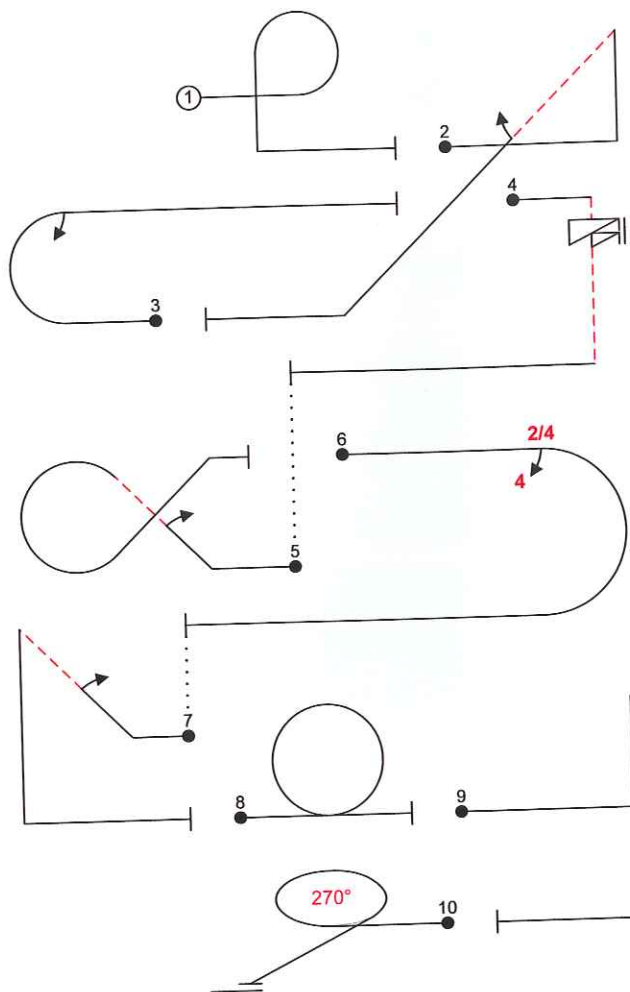
The Extra 300LP is a certified, unlimited category aerobatic aircraft built specifically with competition and performance pilots in mind.



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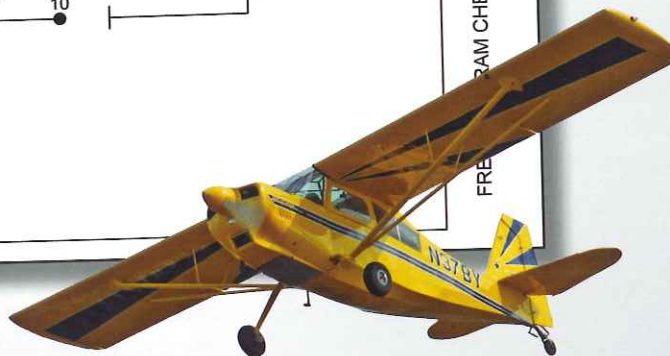
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## INTERESTED IN AEROBATICS?

Look to the International Aerobatic Club (IAC), a division of EAA, for more information. The IAC is the aerobatic authority in the United States and is divided into chapters, just like EAA. Here you will find competitors, judges, and people who want to be part of aerobatics. The IAC also maintains a website ([www.EAA.org/IAC](http://www.EAA.org/IAC)), as do a number of chapters, with helpful resources for those interested in aerobatics. IAC holds competitions across the United States and also has programs for those not wishing to enter competition but who wish to work on precision aerobatics. The website maintains a list of aerobatic schools across the country.



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