## In English, please



# Listening Comprehension... USE FREE INTERNET RESOURCES TO IMPROVE YOUR ENGLISH

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If you sign up on www.pilotworkshop.com, you'll receive every Tuesday a free "pilot's tip of the week". It's usually a link sent by e-mail, leading you to an article which can be an audio document. The subjects cover a wide range of aeronautical topics. Below is the transcription of a recording entitled "Tip For Avoiding A Stall/Spin". Listen to the first 5 minutes on

http://pilotworkshop.com/rod/spins and try to find the missing words in the text.

When performing a (-1), how do you ensure that both wings will stall at the same time? The answer is ... wait for it ..., wait ..., you make sure they both have the same angle of attack at the moment of stall. You do that by ensuring that both wings are moving through the air at essentially the same speed and in the same direction at the moment of stall. You can make this happen by making sure that at the moment of stall, the (--2) is pointed in the direction the airplane moves through the air. Said another way, you make sure that your flight controls are (-3) when the airplane stalls. Unless you are flying some badly ( - - - 4) airplane, both wings will stall at the same time if the stall is coordinated. And even if they don't stall at precisely the exact same time, the stall that does occur typically results in a relatively slight and (-5) rotation. If you stall with the flight controls coordinated you'll stall predictably. So, congratulations, you are an air psychic, a real (-6) Kreskin\* because now, you can predict how your airplane will behave in a stall.

So, what happens if you stall an airplane in (-7) flight? The answer is: it's likely one wing will stall before the other, possibly resulting in an (---8). Let's examine how this can happen. You know that pushing on a (--9) in level flight results in the airplane (-10). (--10) means that one wing moves forward while the other, by default, must move aft. Any time one wing moves forward, and the other moves aft, the forward moving wing develops a little more airspeed, thus a little more (-11), and it rises. The aft moving wing develops a little less airspeed, thus a little less (-11), and it moves down.

#### Got that? Good, let's continue!

The wing that rises generates a (-12) amount of wind that blows on it from above. That means the angle of attack on the rising wing decreases ever so (-12) as a result of it moving upward. The descending wing, however, generates a ( - 12) amount of wind that blows on it from below. That means the angle of attack on the descending wing must increase (-12). Now we're ready to see the results of inducing a yaw with your rudder pedals the moment the airplane stalls. I want you to imagine doing a ( - - 13) straight ahead. Go ahead! Pull that ( - 14) back and get that nose above the (-15) and hold it there. Good!

Just as the airplane approaches a stall, right about when you begin to feel the wing (-16), I want you to apply full left rudder and watch what happens. Don't worry I am with you here. All right? Do it!

Bingo! OK, I say that word because right now you probably wish you were in a church somewhere playing that game rather than experiencing what you are experiencing right now.

As you apply left rudder, the left wing moves aft and downward and its angle of attack increases slightly, while the right wing moves forward and upward and its angle of attack decreases slightly. The result of slightly different angles of attack on each wing, was that the left wing stalled first and stalled more deeply, while the right wing stalled later but did not stall as much. You know this because the left wing falls and yaws in the aft direction while the right wing rises and yaws in the forward direction.

Of course this vertical and yawing motion induces a (-17), too, which appears to result in the airplane initially (--18), often more than ninety degrees followed by the nose initially pointing toward the ground. (-19)! But congratulations to you. If you don't do anything else but hold that (-20) full aft, then you've most likely just entered your first spin.

### Then listen to the rest of the recording and answer these few questions:

- 1 Who was your best friend before Rod Machado?
- 2 On what is the author's decision final?
- **3** Why does the rudder remain effective throughout the stall?
- 4 What don't you want to do?
  - \* Kreskin is a mentalist well-known in the US

    (www.amazingkreskin.com)

#### Missing words and vocabulary

1 – A STALL, TO STALL: décrochage, décrocher; 2 – AIRPLANE'S NOSÉ; 3 – COORDINATED; 4 – OUT OF RIG: mal réglé; 5 – BENIGN; 6 – AIRFOIL: profil aérodynamique; 7 – UNCOORDINATED; 8 – ENTRY TO A SPIN: début de vrille; 9 – RUDDER PEDAL: pédale de palonnier; 10 – YAWING, TO YAW: oscillation en lacet, partir en lacet; 11 – LIFT: portance; 12 – SLIGHT, SLIGHTLY: léger, légèrement; 13 – POWER-OFF STALL: décrochage sansmoteur; 14 – THROTTLE: manette des gaz; 15 – HORIZON; 16 – BUFFET: trembler; 17 – ROLL: roulis; 18 – BANKING STEEPLY: s'incliner fortement; 19 – YIKES: oups; 20 - STICK: manche.