Consultation – Draft AC 61-16 v1.0 –Spin avoidance and stall recovery training

**Overview**

The purpose of this Advisory Circular (AC) is to highlight to flight training operators and instructors, the risks associated with advanced stalling training, when conducted in aircraft that are not certified for intentional spins and minimize the potential for negative transfer of training.

The induction of spins in aircraft not certified for spinning has been occurring in the flying training context. It is possible this is due to the confounding of the definitions of the words “wing drop” and “incipient spin” in training and practice and has resulted in loss of control in the air (LOC-I) incidents and fatalities. It is possible that instructors may be conducting training beyond the limits of their aircraft to meet training needs without proper consideration of potential outcomes.

This AC provides information and guidance regarding the conduct of advanced stalling exercises; in particular, stalls with a wing drop. Definitions of wing drop at the stall and spin at the incipient stage are clarified, certification standards providing margins of safety in specific modes of flight are discussed, and methods of training and practice are provided.

Draft AC 61-16 v1.0 is new and supports the ongoing activities of Part 61 of *Civil Aviation Safety Regulations 1998* (*CASR) – Flight Crew Licensing*, where the regulations require that training must be conducted by an operator authorised by CASA under Parts 141 or 142 of CASR, in accordance with an approved syllabus of training. The training and assessment must be conducted by a person authorised by CASA and satisfy the standards specified in the Part 61 Manual of Standards (MOS).

Draft AC 61-16 v1.0 will also provide guidance for an upcoming proposed amendment to the Part 61 MOS, to change the practice of advanced stall training. This proposed amendment would remove the requirement for recovery of spins at the incipient stage, in favour of avoiding spins by training recovery from wing drop at the stall, making it consistent with spin avoidance and stall recovery training principles used in International Civil Aviation Organization upset prevention and recovery training (UPRT).

The benefits of replacing the “incipient spin” exercise with “stall with a wing drop” are:

* alignment with ICAO UPRT training philosophy; in particular, spin avoidance and stall recovery training
* increased awareness of aircraft limitations, and the extent to which an aircraft is tested for certification
* removes the requirement for a spin to be induced with application of pro-spin rudder except for spin training activities which must be conducted in an aircraft certified for intentional spins.

This AC:

* clarifies definitions of wing drop at the stall and spin at the incipient stage
* discusses certification standards and the margins of safety provided in specific modes of flight
* describes the safe conduct of advanced stalling exercises, in particular stalls with a wing drop, consistent with spin avoidance and stall recovery training principles used in ICAO training standards for personnel licensing and upset prevention and recovery training (UPRT) standards.

**This AC will be of interest to:**

* Part 141 and 142 operators
* Heads of Operations
* Flight instructors
* Flight examiners
* Licensed pilots
* Student pilots

**Why are we consulting**

This is the initial AC relating to spin avoidance and stall recovery training. We are seeking feedback on whether it provides adequate guidance on conducting advanced stalling exercises – in particular stalls with a wing drop.

A copy of the draft AC is provided below. Please read the document before providing your feedback in the online survey.

Please note: CASA can no longer offer the option to upload files because of the potential risk of malware.

**Using an iPad**

If you are using an iPad to complete the survey you will be asked to 'download the relevant PDF'. Depending on the software you have on your iPad you may need to download the free viewer to review the single document PDF files. Where a file is a 'multi-file or portfolio PDF you will need to source the Adobe free view - available from iTunes.

### What happens next

At the end of the response period for public comment, we will review each comment and submission received through the online response form. We will make all submissions publicly available on the CASA website, unless you request your submission remain confidential. We will also publish a summary of consultation which summarises the feedback received, outlines any intended changes and details our plans for the AC.

Information about how we consult and how to make a confidential submission is available on the [CASA website](https://www.casa.gov.au/rules-and-regulations/landing-%20page/consultation-process).

To be notified of any future consultations, you can subscribe to our [consultation and rulemaking mailing list](https://mailinglist.casa.gov.au/?p=subscribe&id=3).

**Give Us Your Views** (appears on the overview page near the bottom)

Online Survey (hyperlinks to the online survey pages)

**Related** (appears on the overview page near the bottom)

* Draft AC
* MS word document

**PAGE 1: Personal Information**

First name

(Required)

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Last name

(Required)

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Email

If you enter your email address you will automatically receive an acknowledgement email when you submit your response.

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## Do your views officially represent those of an organisation?

(Required)

*Please select only one item*

* Yes, I am authorised to submit feedback on behalf of an organisation
* No, these are my personal views.

## If yes, please specify the name of your organisation.

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Which of the following best describes the group you represent?

*Please select only one item*

[ ]  Part 141 operator

[ ]  Part 142 operator

[ ]  Flight instructor

[ ]  Licensed Pilot

[ ]  Student Pilot

[ ]  Other

Please specify if you have selected “Other”.

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**PAGE 2: Consent to publish Submission**

In order to provide transparency and promote date, we intend to publish all responses to this consultation. This may include both detailed responses/submissions in full and

aggregated data drawn from the responses received.

Where you consent to publication, we will include:

* your name, if the submission is made by you as an individual or the name of the organisation on whose behalf the submission has been made
* your responses and comments

We **will not** include any other personal or demographic information in a published

response.

(Required)

*Please select only one item*

[ ]  Yes - I give permission for my response/submission to be published.

[ ]  No - I would like my response/submission to remain confidential but understand that de-identified aggregate data may be published.

[ ]  I am a CASA officer.

Information about how we consult and how to make a confidential submission is

available on the [CASA website](https://www.casa.gov.au/rules-and-regulations/landingpage/consultation-process)**.**

**PAGE 3:** Draft AC 61-16 v1.0 – Spin avoidance and stall recovery training – feedback

The purpose of this AC is to:

* clarify definitions of wing drop at the stall and spin at the incipient stage
* discuss certification standards and the margins of safety provided in specific modes of flight
* describe the safe conduct of advanced stalling exercises - in particular stalls with a wing drop, consistent with spin avoidance and stall recovery training principles used in International Civil Aviation Organization upset prevention and recovery training (UPRT),

Q.1 Is this AC fit for purpose?

[ ]  Agree

[ ]  Agree, but with changes (please specify)

[ ]  Disagree (please specify why)

[ ]  Not my area of expertise/not applicable

**Comments**

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Q.2 Do you agree the recovery from wing drop at the stall training proposed in this AC, will enable a pilot to safely avoid a spin?

[ ]  Agree

[ ]  Agree, but with changes (please specify)

[ ]  Disagree (please specify why below)

[ ]  Not my area of expertise/not applicable

**Comments**

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Q.3 Do you agree the advice provided in this AC will enable a flight instructor to improve the way in which they teach spin avoidance?

[ ]  Agree

[ ]  Agree, but with changes (please specify)

[ ]  Disagree (please specify why below)

[ ]  Not my area of expertise/not applicable

**Comments**

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Q.4 Is the instruction in spin avoidance in the proposed AC sufficient to ensure competence in this area, when qualifying for a pilot’s licence?

[ ]  Agree

[ ]  Agree, but with changes (please specify)

[ ]  Disagree (please specify why below)

[ ]  Not my area of expertise/not applicable

**Comments**

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Q.5 Do you think instruction in recovery from spins should be required training for the grant of a pilot’s licence?

[ ]  Agree

[ ]  Agree, but with changes (please specify)

[ ]  Disagree (please specify why)

[ ]  Not my area of expertise/not applicable

**Comments**

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Q.6 Do you think testing a pilot’s ability to recover from spins should be a required component of pilot licence flight test?

[ ]  Agree

[ ]  Agree, but with changes (please specify)

[ ]  Disagree (please specify why)

[ ]  Not my area of expertise/not applicable

**Comments**

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Q.7 Should flight training organisations be required to conduct all training for the grant of Recreational, Private and Commercial Pilot Licences, in aircraft certified for intentional spinning?

[ ]  Yes

[ ]  Yes, but with changes (please specify)

[ ]  No (please specify why)

[ ]  Not my area of expertise/not applicable

**Comments**

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**General comments**

Please provide any further comments you may have on draft AC 61-16 v1.0 in the comments box below.

**Fact Bank**

**Draft AC 61-16 v1.0.PDF**

**Comments**

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