



Staff Instruction

Subject: Attention Deficit/Hyperactivity Disorder

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1.0 Introduction

1.1 Purpose

- (1) The purpose of this document is to provide direction for the assessment of Attention Deficit/Hyperactivity Disorder (ADHD) and the medications used to treat ADHD in aviation Medical Certificate (MC) applicants.

1.2 Applicability

- (1) This Staff Instruction (SI) is applicable to Transport Canada (TC) Civil Aviation Medicine (CAM) Branch personnel, contractors, Civil Aviation Medical Examiners (CAMEs), and other personnel appointed by the Director Civil Aviation Medicine (DCAM) to be involved in the assessment of MC applicants.

1.3 Description of changes

- (1) Not applicable.

2.0 References and requirements

2.1 Reference documents

- (1) The following reference materials may be used in conjunction with this document:
 - (a) [Aeronautics Act](#) (R.S.C., 1985, c. A-2)
 - (b) [Canadian Aviation Regulations \(CARs\), Part IV, subpart 4](#)
 - (c) Staff Instruction (SI) 404-001 Issue 01 — Aeromedical Risk Assessment and Risk Management (RDIMS 14833813)
 - (d) SI 424-001 Issue 01 — Aviation Medical Review Board – Terms of Reference (RDIMS 14918090)
 - (e) SI 404-005 Issue 01 — Medications and Aviation Medical Certification (RDIMS 17917362)
 - (f) ICAO Document 8984 AN895 Manual of Civil Aviation Medicine
 - (g) Diagnostic and Statistical Manual of Mental Disorders, 5th Edition.
 - (h) [Brunkhorst-Kanaan, N., Libutzki, B., Reif, A., Larsson, H., McNeill, R. and Kittel-Schneider, S., 2021. ADHD and accidents over the life span – A systematic review. *Neuroscience & Biobehavioral Reviews*, 125, pp.582-591.](#)

2.2 Cancelled documents

- (1) Not applicable.

2.3 Definitions and abbreviations

- (1) The following **abbreviations** are used in this document:
 - (a) **AA:** *Aeronautics Act*
 - (b) **ADD:** Attention Deficit Disorder

- (c) **ADHD:** Attention Deficit/Hyperactivity Disorder
- (d) **AE:** Adverse Effects
- (e) **AMO:** Aviation Medical Officer
- (f) **CAM:** Civil Aviation Medicine
- (g) **CAME:** Civil Aviation Medical Examiner
- (h) **CASA:** Civil Aviation Safety Authority (Australia)
- (i) **DSM:** Diagnostic and Statistical Manual of Mental Disorders
- (j) **DSM 5:** Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
- (k) **ICAO:** International Civil Aviation Organization
- (l) **MC:** Medical Certificate
- (m) **NPT:** Neuropsychological testing
- (n) **RAMO:** Regional Aviation Medical Officer
- (o) **SI:** Staff Instruction
- (p) **TC:** Transport Canada
- (q) **UK CAA:** United Kingdom Civil Aviation Authority
- (r) **US FAA:** United States Federal Aviation Administration

3.0 Background

- (1) For the purposes of this SI, ADHD includes the diagnosis according to the current criteria described in DSM 5 (Ref 2.1(1)(g)) and the previous corresponding diagnoses described in earlier versions of the DSM, including ADD.
- (2) Key points about ADHD include:
 - (a) “It is estimated that ADHD is present in about 5% of children and 2.5% of adults.” (Ref 2.1(1)(g))
 - (b) “The essential feature of attention deficit/hyperactivity disorder (ADHD) is a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development.” (Ref 2.1(1)(g))
 - (c) “Typically, symptoms vary depending on context within a given setting. Signs of the disorder may be minimal or absent when the individual is receiving frequent rewards for appropriate behaviour, is under close supervision, is in a novel setting, is engaged in especially interesting activities, has consistent external stimulation (e.g. via electronic screens), or is interacting in one-on-one situations (e.g. the clinician’s office).” (Ref 2.1(1)(g))
 - (d) “The [82] studies included in [a 2021] systematic review strongly support increased risk of accidents or unintentional injuries in patients with ADHD in all age groups.” (Ref 2.1(1)(h))
- (3) From an aviation safety standpoint, both ADHD and the medications used to treat ADHD are concerning as they can severely compromise the ability of an individual to function safely in the aviation environment. Individuals with ADHD or taking medications used to treat ADHD can represent a risk to themselves, to others, and to the safe operation of aircraft.

- (4) **Thus, ADHD and the medications used to treat ADHD are each considered disqualifying for aviation medical certification** under CARs (Ref 2.1(1)(b)) [Standard 424 Physical and Mental Requirement](#) sections 1.1, 2.1, 3.1, and 4.1. From an ICAO perspective, ADHD would be disqualifying according to the ICAO Manual of CAM (Ref 2.1(1)(f) section 9.1.3.
- (5) TC's approach to ADHD is consistent with the approaches taken by other major regulators, including the US FAA, UK CAA, and CASA.
- (6) The purpose of this SI is to provide direction for consistency in assessing MC applicants with reported ADHD and/or taking medications used to treat ADHD. This SI complements, but does not replace, the requirement for physicians to apply sound clinical judgement, experience, and discretion.

4.0 Assessment and disposition

4.1 Initial self-grounding

- (1) All **current holders** of valid MCs are subject to the provisions of section 404.06(1)(a) of the CARs. Thus, they shall not exercise the privileges of their permit, rating, or license if they are experiencing illness/injury/disability, taking a drug, or receiving medical treatment that could impair their ability to exercise those privileges safely. Thus, a current holder of a valid MC is required to self-ground with a new diagnosis of ADHD or if taking medications used to treat ADHD.

4.2 Disposition

- (1) Current diagnosis and/or taking medication
 - (a) Any **current holder** of a valid MC or **new applicant** for an MC of any Category with a current diagnosis of ADHD and/or taking medication used to treat ADHD will be assessed as **unfit** for all categories of aviation medical certificate.
- (2) Suspected Diagnosis
 - (a) Any **current holder** of a valid MC of any Category who has a suspected diagnosis of ADHD and/or is being investigated by their healthcare provider for ADHD will be **initially** assessed as **unfit** until sufficient information for assessment has been provided to CAM through a **Comprehensive Mental Health Assessment** (see Appendix A).
 - (b) Any **new applicant** for an MC of any Category who has a suspected diagnosis of ADHD and/or is being investigated by their healthcare provider for ADHD will have their application **deferred for assessment by CAM** until sufficient information for assessment has been provided to CAM through a **Comprehensive Mental Health Assessment** (see Appendix A).

4.3 Requirements to be considered for certification

- (1) In order to be considered for aviation medical certification, applicants with a suspected or previously confirmed diagnosis of ADHD (e.g. remote childhood diagnosis) and/or who were previously treated with a medication used to treat ADHD must be stable, functional, and no longer meet DSM 5 diagnostic criteria for ADHD **after being assessed a minimum of 6 months after discontinuing medications used to treat ADHD.**

4.4 Neuropsychological testing (NPT)

- (1) NPT may be requested to assist assessment of an application, at RAMO discretion.

- (2) NPT must be completed **a minimum of 6 months after discontinuation of medications** used to treat ADHD. **Confirmatory drug testing** will be required at the time NPT is undertaken to ensure validity of the NPT results.

4.5 Assessment and approval by CAM

- (1) CAM will assess applicants on a case-by-case basis.
- (2) If CAM has doubt about whether an applicant may be certified, the preservation of aviation and public safety will prevail as the overriding consideration, and a conservative approach will generally be taken.

5.0 Information management

- (1) Management of aviation medical information shall be in accordance with TC departmental and CAM Branch practices.

6.0 Document history

- (1) Not applicable

7.0 Contact us

- (1) For more information contact: NCRCivAvMedicineInquiries-EnquetesMedecineAeroCivRCN@tc.gc.ca

Document approved by

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Appendix A — Comprehensive Mental Health Assessment: Attention Deficit/Hyperactivity Disorder (ADHD)

- (1) A Comprehensive Mental Health Assessment **must include**:
- (a) History of presenting problem.
 - (b) Psychiatric review of symptoms (including any features of comorbid depression, anxiety, mania/hypomania, panic attacks, trauma, obsessions/compulsions, suicidal or homicidal thoughts, and psychosis).
 - (c) Past mental health history (including hospitalizations, prior diagnoses, treatments, previous suicidal/homicidal ideation or attempts).
 - (d) Medications (type, dose, frequency, anticipated course of treatment, adverse/side-effects, effectiveness).
 - Note 1:** To be considered for certification, applicants must be stable, functional, and **no longer meet Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM 5) diagnostic criteria** for ADHD after being **assessed a minimum of 6 months after discontinuing medications** used to treat ADHD.
 - Note 2:** Neuropsychological testing with confirmatory drug testing may be required by Transport Canada.
 - (e) Substance use history (including alcohol, cannabis, other substances).
 - (f) Contributory family psychiatric history.
 - (g) Contributory social and developmental history.
 - (h) Contributory medical or surgical history.
 - (i) Diagnoses (in accordance with DSM 5). **It is essential to comment on the following:**
 - (i) ADHD (or Attention Deficit Disorder according to earlier versions of the DSM), including reference to the **relevant DSM diagnostic criteria**.
 - (ii) Other diagnoses (including depression, anxiety, panic disorder; other neurocognitive syndromes, learning disorders, dyslexia, apraxia).
 - (j) Management plan (including pharmacological and non-pharmacological treatments, follow-up, work limitations).
 - (k) Prognosis based on current consistent level of function and stability in **multiple contexts**.
 - Note 3: Reporting on function in isolated encounters or specific contexts is insufficient.** DSM 5 states: “Typically, symptoms vary depending on context within a given setting. Signs of the disorder may be minimal or absent when the individual is receiving frequent rewards for appropriate behaviour, is under close supervision, is in a novel setting, is engaged in especially interesting activities, has consistent external stimulation (e.g. via electronic screens), or is interacting in one-on-one situations (e.g. the clinician’s office).”
 - (l) Any other information of relevance and **clinician concerns about aviation safety**.