REPORT OF THE GROUP TO RECOMMEND POLICY ON
MANNING OF COCKPIT AND MEDICAL/PSYCHOMETRIC
TEST FOR FLIGHT CREW

JULY 2015
NEW DELHI
1. Introduction

On 24th March 2015, Germanwings Airbus A320 aircraft D-AIPX was operating scheduled flight 4U9525 from Barcelona (Spain) and Düsseldorf (Germany). There were six crew members (2 flight crew and 4 cabin crew) and 144 passengers were on board the aircraft. The same crew had operated the outbound flight from Düsseldorf to Barcelona.

The accident is under investigation by the BEA, France. As per the Preliminary Investigation Report release by BEA France in May 2015, the aircraft took-off from Barcelona at 09:00 hrs. At 09:27:20 hrs, the aircraft levelled off at a cruise altitude of 38,000 feet. At 09:30:08 hrs, the commander left the cockpit at the beginning of the cruise at FL380. The selected altitude changed from 38,000 feet to 100 feet while the co-pilot was alone in the cockpit. The aeroplane then started a continuous and controlled descent on autopilot. Several altitude selections towards 100 feet were recorded during descent on the flight that preceded the accident flight, while the co-pilot was alone in the cockpit. During the descent of the accident flight, the Marseille control centre called the flight crew on eleven occasions on three different frequencies, without any answer being transmitted. The French military defence system tried to contact the aircraft on three occasions during the descent, without any answer. The buzzer to request access to the cockpit sounded once during the descent, 4 min 7 s after the Captain had left. The interphone sounded in the cockpit, 4 min 40 s after the Captain had left. Three other calls on the interphone sounded in the cockpit. None of the calls using the interphone elicited any answer. Before the collision with the terrain, warnings from the GPWS, Master Caution and Master Warning sounded. The aircraft collided with the terrain at 09:41:06 hrs.

The preliminary investigation also revealed that the co-pilot obtained a class 1 medical certificate from Lufthansa aeromedical centre without restrictions on 9 April 2008 which was valid upto 9 April 2009. On 9 April 2009, his class 1 medical certificate was not
revalidated by the Lufthansa aeromedical centre due to depression and on medication thereto. On 14 July 2009, his request for renewal of his class 1 medical certificate was refused by the Lufthansa aeromedical centre. However, on 28 July 2009, the co-pilot obtained a new class 1 medical certificate valid until 9 April 2010, endorsed with the note ‘‘Note the special conditions/restrictions of the waiver FRA 091/09 -REV-’’. His pilot’s licence then included the limitation ‘‘***SIC**incl. PPL ***’’, which means for ‘‘Specific regular medical examinations – contact the licence issuing authority’’. This limitation requires that the aeromedical examiner (AME) to contact the licence issuing authority before proceeding with a medical evaluation relating to any extension or renewal of the medical certificate. It may relate to the medical history that the AME must be informed of before undertaking an assessment. From July 2009, he obtained each year a class 1 medical certificate valid for one year that was endorsed with the note ‘‘Note the special conditions/restrictions of the waiver FRA 091/09 –REV-’’. The last valid class 1 medical certificate had been issued on 28 July 2014 and was valid until 14 August 2015.

Consequent upon the Germanwings above mentioned accident, the Director General of Civil Aviation constituted a Group of the following officers to carry out a study and recommend/review (a) policy on manning of cockpit during non-critical phases of flight and (b) medical/psychometric tests for flight crew:

a) Sh. Lalit Gupta, Joint Director General  
b) Sh. Maneesh Kumar, Director Air Safety  
c) Sh. Bharat Bhushan, Director Operations (Training & Licensing)

Views of Gp. Capt. (Dr.) Rajesh Kumar, DMS (CA) and Capt. Aditi Samant, a pilot and clinical psychologist were also taken on the contents of the report.

2. **Policy on Manning of Cockpit**

2.1 **EASA Guidelines**

The European Aviation Safety Agency (EASA) issued a Safety Information Bulletin (SIB 2015-04) dated 27 March 2015 on authorised persons in the flight crew compartment
(Annexure 1). This bulletin recommends operators to re-assess the safety and security risks associated with flight crew members leaving the flight crew compartment due to operational or physiological needs during non-critical phases of flight. Based on this assessment, operators are recommended to implement procedures requiring at least two authorised persons to be in the flight crew compartment at all times, or other equivalent mitigating measures to address risks identified by the operator’s revised assessment.

2.2 **FAA Guidelines**

The Federal Aviation Administration (FAA) of USA has a provision contained in Volume 3, Chapter 2, Para 3.47 (B)(f) which lays down procedures to ensure two persons are always on the flight deck. For two person flight crews, this means when one flight crew member leaves the flight deck, another individual that is qualified in accordance with § 121.547(a)(1-3), such as a Flight Attendant, must be present to lock the door and remain on the flight deck until the flight crew member returns to his or her station (Annexure 2).

2.3 **CAA, New Zealand Guidelines**

The Civil Aviation Authority, New Zealand issued directive dated 27 Mar 2015 stating that “CAA requires large jet aircraft operators in New Zealand to ensure they have a minimum of two people in the flight deck at any given time. This applies to domestic and International flights. This new stipulation recognises that temporary inflight incapacitation could occur for a number of reasons, including a medical event” (Annexure 3).

2.4 **GCAA, UAE Guidelines**

The General Civil Aviation Authority (GCAA), UAE issued Safety Alert 08/2015 dated 2nd April 2015 (Annexure 4) inter-alia stating the following:

“1. Operators to re-assess the safety and security risks associated with flight crew members leaving the flight crew compartment due to operational or physiological needs during non-critical phases of flight.
2. Flight crew members required to be on flight deck duty should take all necessary precautions to limit their absence from the cockpit.

3. If deemed necessary and based on the assessment, operators may implement procedures on two-person cockpit rule requiring at least two persons to be in the flight crew compartment at all times. The relief person can be any member of the flight crew or cabin crew or an engineer”.

2.5 **Transport Canada Guidelines**

Transport Canada issued Interim Order No. 3 dated 22 Apr 2015 wherein all air operators must ensure that, if a flight crew member leaves the flight deck during flight time, one flight crew member and one other authorized person are present on the flight deck while the flight crew member who left the flight deck is absent (Annexure 5).

2.6 **DGCA, India Guidelines**

In India, there was a serious incident involving Air India Express Boeing 737-800, VT-AXJ while operating Flight No IX-212 from Dubai to Pune on 26.05.2010. Investigation revealed that the aircraft was cruising at flight level 370 with auto-pilot and auto-throttle engaged. During cruise, the commander left the cockpit for natures call. The co-pilot, who was alone in the cockpit, inadvertently handled the control column in fully automated mode, which resulted into an unusual descent of the aircraft by 6800 feet in approx 67 seconds. The Pilot-in-Command used the emergency access code to enter the cockpit, and manually arrested the rate of descent. The investigation concluded that the incident occurred due to inadvertent handling of the control column in fully automated mode by the copilot which got compounded as he was not trained to recover the aircraft in automated mode.

Consequent upon the above incident, DGCA issued Air Safety Circular 03 of 2010 on “Manning of Cockpit during Non-Critical Phases - Standard Procedures” (Annexure 6). As per the Air Safety Circular, “All aircraft/Operators require that at all given times the Cockpit has to be manned by minimum crew compliment. In case one of the crew
members has to leave the cockpit during the non-critical phases of flight the cabin crew is required to be inside the cockpit and occupy the observer seat. In no case the cabin crew will occupy the seats meant for Cockpit crew. The procedure to be followed is as follows:

- Prior to opening the Flight Deck door, the forward galley area should be free of passengers and the curtain between the galley and cabin is closed.
- The absence should be restricted to the minimum time necessary.
- The flight deck door is locked whilst crew member is absent.
- The forward galley area must remain sterile during the absence from the flight deck.
- The crew member returning to the flight deck should follow the entry request procedure.”

The above Air Safety Circular is in vogue, which is being followed by all the airlines meticulously and does not require any amendment.

3. **Policy on Medical/Psychometric Test for Flight Crew**

3.1 **Medical Standards for Flight Crew**

The medical standards of pilots/co-pilots for commercial flying are equivalent to the medical standards of Class-I medical assessment enumerated in International Civil Aviation Organisation (ICAO) Annexure 1 and medical requirements laid down by DGCA as per CAR Section 7, Series C, Part I.

**Class I Medical:** Commercial Pilot Licence (CPL) (Aeroplane, Helicopter), Senior Commercial Pilot Licence (SCPL), Airline Transport Pilot Licence (ATPL), Flight Navigator Licence (FNL), Flight Engineer Licence (FEL), Private Pilot Licence (PPL) with Instrument Rating.

**Class II Medical:** Private Pilot License (PPL), Student Pilot Licence (SPL), Flight Radio Telephony Operator Licence (FRTOL), Cabin Crew.
Class III Medical: ATC Controllers.

All applicant for Class-I, Class-II and Class-III medical assessment shall undergo medical examination based on following requirements:

a) **Physical and Mental**
   An applicant for any class of medical assessment shall be free from:
   
   (i) Any abnormality, congenital or acquired; or
   
   (ii) Any active, latent, acute or chronic disability; or
   
   (iii) Any side effect or side-effect of any prescribed or non-prescribed therapeutic, diagnostic or preventive medication taken; such as would entail a degree of functional incapacity which is likely to interfere with the safe operation of an aircraft or with the safe performance of duties.

b) **Visual and Color Perception**
   Visual - Class I & Class III medical - Distant visual acuity with or without correction shall be 6/9 or better in each eye separately, and binocular visual acuity shall be 6/6 or better. No limits apply to uncorrected visual acuity.

   Class II medical - Distant visual acuity with or without correction shall be 6/12 or better in each eye separately, and binocular visual acuity shall be 6/9 or better. No limits apply to uncorrected visual acuity.

   Colour - Class I & Class III medical – required
   Class II medical – not required for day time flying.

c) **Hearing**
   Applicant shall not have a hearing loss in either ear separately, or more than 35dB at any of the frequencies 500, 1000 or 2000 Hz, or more than 50 dB at 3000 Hz, when tested on Pure Tone audiometry (PTA).
As per ICAO Annex I, the frequency of PTA testing is as shown in the following Table.

<table>
<thead>
<tr>
<th>Class-I</th>
<th>Class-II</th>
<th>Class-III</th>
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<tbody>
<tr>
<td>Initial medical Not less than once every 5 years upto 40 years and two yearly thereafter.</td>
<td>Initial medical Not less than once every two years after 50 years of age.</td>
<td>Initial medical Not less than once every four years upto 40 years and two yearly thereafter.</td>
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It may be seen that the medical standards of flight crew mandated by DGCA are in line with international best practices and do not require any amendment.

3.2  **Psychometric Test for Flight Crew**

3.2.1 Regulatory Provisions

**EASA** - Annex III 1.a.1 to Regulation (EC) No. 216/2008 (Basic regulation) refers to pre-selection of pilots as follows: “A person undertaking training to fly an aircraft must be sufficiently mature educationally, physically and mentally to acquire and demonstrate the relevant theoretical knowledge and practical skill.” There is no guidance material about details as to how this can be assured.

**FAA (USA)** - 14 CFR Part 61 requires for commercial pilots the relevant medical examination and to read, speak, write and understand the English language and: “§ 61.153 (c) Be of good moral character”.

**CASA (Australia)** - Beside the “Medical Fitness and Language Proficiency” the following applies: CAR 5.09 Flight crew license issue and refusal: “(1)(c) is a fit and proper person to hold the license.”

**Transport Canada** - “The flight training unit shall ensure that an applicant, before being admitted to an integrated course, has a secondary school diploma or equivalent in accordance with the personal licensing standards.”
CAAC (China) – In additional to “Medical Fitness and Language Proficiency” contained in CCAR Part 61, the following requirements apply:

61.103 Eligibility requirements for student pilots “(b) Be of good moral character”
61.153 Eligibility requirements for commercial pilot certificate “(b) Be of good moral character” and “(d) At least graduate from high school”
61.183 Eligibility requirements for ATPL “(b) Be of good moral character” and “(d) At least graduate from high school” In the English version, there is no guidance material.

DGCA (India) - Civil aviation requirements (CAR) Section 7 Series “B” Flight Crew Standards, Training and Licensing:

“In general, an applicant for issue of a license should “meet the requirements in respect of Age, Basic Educational Qualification, Medical fitness ...”

§ 7.3 Commercial Pilot: The applicant should have
“a) Passed 10 + 2 standard examination with Physics and Mathematics Subjects from a recognized Board/University or an equivalent examination.”

In general, there are no guidelines on the psychometric test for flight crew issued by DGCA. However, at present some of the scheduled domestic airlines are engaged in a thorough assessment process for selection of co-pilots using psychometric tools. The tool is used by many airlines world over and is considered a legal document with due privacy laws as per agreements with the user. The test is designed to test the suitability of candidates to be an 'ideal' pilot and consists of the following:

a) Questionnaires designed to map a candidate’s psychological profile.
b) Face-to-face interview with evaluators.
c) A skill/reasoning under stress test wherein candidate flies a typical Pilot Aptitude test (with all cockpit controls and a Head-up Display). The aircraft is deliberately set out of trim and the candidate is given a navigation task to be completed in a
time bound manner. All along on side screens, there are various questions flashing which test his verbal, numerical and spatial reasoning under stressful conditions.

During the above process, numerous attributes of the candidates are tested such as confidence levels (over, under confident, neutral); leadership styles; effect on psyche, skill levels and reasoning abilities under normal conditions and under stress; personality attributes; integrity; motor Skills both cognitive and physical; motivational attributes; attitude; anxiety; efficacy (quality of being successful in producing an intended result); integrity; openness; adherence; etc.

To discuss the issue of introduction of psychometric test for pilots, a meeting of company doctors of all the scheduled domestic airlines was called at DGCA Hqrs on 10 Apr 2015. It was deliberated that any occurrence arising out of a human factor problem that compromises the safety of the aircraft operations is a flight safety issue which needs to be addressed systematically for prevention of unwanted occurrences. This may require psychological testing, awareness and education programs and counselling of the flight crew. The airline representatives were advised to consult trained aviation psychologists and forward a proposal in this regard. It was agreed that Dr. PK Shrivastava of Air India would submit the final views to DGCA after consultation with all the airlines. Accordingly, following suggestions have been made by the airlines:

a) An extensive psychiatric evaluation as a part of the routine pilot aeromedical assessment is neither productive nor cost effective and, therefore, not warranted.
b) During pre-flight medical examination, with proper rapport with pilots, questions may be asked about work, fatigue, home and family, but not under camera.
c) A column of clinical/behavior condition may be added in the Breath-analyser Test register of pre-flight medical examination.
d) A random pre-flight check at foreign stations for alcohol and psychosis should also be restarted as a preventive measure.
e) A detailed psychometric analysis of pilots may be considered at different levels.
f) The psychometric analysis should be done by airline panel of psychiatrists.
g) Extensive psychiatric evaluation as a part of routine aeromedical assessment is not considered necessary.
4. **Recommendations**

4.1 There is no need to amend Air Safety Circular 03 of 2010 on “Manning of Cockpit during Non-Critical Phases - Standard Procedures”.

4.2 There is no need to amend CAR Section 7, Series C, Part I on “Medical Requirements and Examination for Flight Crew Licences” as it is in line with ICAO Annex 1 requirements.

4.3 Psychological assessment of pilots may be introduced to ascertain psychological and/or cognitive status of the pilot at following levels:

a) At the time of applying as ab-initio cadet in the Flying Training Organisation.

b) At the time of recruitment in the airline to ascertain if the aspirant has any traits that would make him a good pilot and to rule out any unwanted personality traits and psychiatric tendencies.

c) Before upgrade as Pilot-in-Command or trainer to assess the suitability to take up a leadership role.

d) In case it becomes apparent during investigation of occurrence, feedback from the trainers and peer group.

e) The psychometric analysis should be carried out by qualified psychologist/psychiatrist having exposure in aviation.

f) Pilots showing psychological abrasions may be referred to AFCME, New Delhi/IAM Bangalore for further evaluation before release.

g) A circular may be issued containing the provisions of Para 4.3 (a) to (f), which will be subject to amendment based on future international best practices.

(Signatures)

(Maneesh Kumar)  
Director Air Safety

(Bharat Bhushan)  
Director Operations (Training & Licensing)

(Lalit Gupta)  
Joint Director General

Date: 15 July 2015  
Place: New Delhi
EASA Safety Information Bulletin

SIB No.: 2015-04
Issued: 27 March 2015

Subject: Authorised persons in the flight crew compartment


Applicability: National Aviation Authorities and commercial air transport (CAT) operators of aeroplanes subject to ORO.SEC.100(b) and operated with more than one cabin crew.

Description: Based on the information currently available following the accident of flight 4U9525, and pending the outcome of the technical investigation, the Agency, in consultation with Member States, makes the following temporary recommendation. This will be reviewed in the light of any new information concerning the accident investigation or the implementation of this SIB.

Recommendation: The Agency recommends operators to re-assess the safety and security risks associated with flight crew members leaving the flight crew compartment due to operational or physiological needs during non-critical phases of flight.

Based on this assessment, operators are recommended to implement procedures requiring at least two persons authorised in accordance with CAT.GEN.MPA.135 to be in the flight crew compartment at all times, or other equivalent mitigating measures to address risks identified by the operator’s revised assessment.

Any additional risks stemming from the introduction of such procedures or measures should be assessed and mitigated.

National Aviation Authorities should ensure that operators under their oversight are aware of the content of this SIB.

Contact(s): For further information contact the Safety Information Section, EASA. E-mail: ADs@easa.europa.eu.

This is information only. Recommendations are not mandatory.
Annexure 2

Part 121 OPERATING REQUIREMENTS: DOMESTIC, FLAG, AND SUPPLEMENTAL OPERATIONS
Subpart T--Flight Operations

Sec. 121.547

Admission to flight deck.

(a) No person may admit any person to the flight deck of an aircraft unless the person being admitted is--

(1) A crewmember;

[(2) An FAA air carrier inspector, a DOD commercial air carrier evaluator, or an authorized representative of the National Transportation Safety Board, who is performing official duties;]

(3) Any person who--
   (i) Has permission of the pilot in command, an appropriate management official of the part 119 certificate holder, and the Administrator; and
   (ii) Is an employee of--
      (A) The United States, or
      (B) A part 119 certificate holder and whose duties are such that admission to the flightdeck is necessary or advantageous for safe operation; or
      (C) An aeronautical enterprise certificated by the Administrator and whose duties are such that admission to the flightdeck is necessary or advantageous for safe operation.

(4) Any person who has the permission of the pilot in command, an appropriate management official of the part 119 certificate holder and the Administrator. Paragraph (a)(2) of this section does not limit the emergency authority of the pilot in command to exclude any person from the flightdeck in the interests of safety.
   Paragraph (a)(2) of this section does not limit the emergency authority of the pilot in command to exclude any person from the flight deck in the interests of safety.

(b) For the purposes of paragraph (a)(3) of this section, employees of the United States who deal responsibly with matters relating to safety and employees of the certificate holder whose efficiency would be increased by familiarity with flight conditions, may be admitted by the certificate holder. However, the certificate holder may not admit employees of traffic, sales, or other departments that are not directly related to flight operations, unless they are eligible under paragraph (a)(4) of this section.

(c) No person may admit any person to the flight deck unless there is a seat available for his use in the passenger compartment, except--
   [(1) An FAA air carrier inspector, a DOD commercial air carrier evaluator, or authorized representative of the Administrator or National Transportation Safety Board who is checking or observing flight operations;]
   (2) An air traffic controller who is authorized by the Administrator to observe ATC procedures;
   (3) A certificated airman employed by the certificate holder whose duties require an airman certificate;
   (4) A certificated airman employed by another part 119 certificate holder whose duties with that part 119 certificate holder require an airman certificate and who is authorized by the part 119 certificate holder operating the aircraft to make specific trips over a route;
   (5) An employee of the part 119 certificate holder operating the aircraft whose duty is directly related to the conduct or planning of flight operations or the in-flight monitoring of aircraft equipment or operating procedures, if his presence on the flightdeck is necessary to perform his duties and he has been authorized in writing by a responsible supervisor, listed in the Operations Manual as having that authority; and
   (6) A technical representative of the manufacturer of the aircraft or its components whose duties are directly related to the in-flight monitoring of aircraft equipment or operating procedures, if his presence on the flightdeck is necessary to perform his duties and he has been authorized in writing by the Administrator and by a responsible supervisor of the operations department of the part 119 certificate holder, listed in the Operations Manual as having that authority.
must have a flight deck door installed that separates the flight deck from the cabin or cargo area to carry individuals under § 121.583.

4) **Method 4: All Cargo Carrying Operations—Non Crewmembers of the Part 121 Certified Air Carrier.**

   a) Certificate holder procedures for accessing the flight deck (jump seat) must include verification of identity, employment status, and jump seat eligibility at gate check-in using the procedures outlined in subparagraph 3-46F2).

   b) All persons being transported in the aircraft must be screened and have their accessible property searched before entering the aircraft:

      1. Pat down or hand-held metal detector for an individual.
      2. Physical inspection of property.

**3-47 PROCEDURES FOR OPENING, CLOSING, AND LOCKING FLIGHT DECK DOORS.**

   **A. Background.**

   1) On January 15, 2002, § 25.772, was amended to require an emergency means to enable a flight attendant (F/A) to enter the flight deck should the flightcrew become incapacitated. This change applies to airplanes that are newly certificated under part 25 and was not retroactive to existing airplanes. The operational requirements found in § 121.313 were also amended on January 15, 2002, to require each operator to establish methods that enable an F/A to enter the flight deck in the event that a flightcrew member becomes incapacitated. As with § 25.772(c), these methods are intended for use under emergency conditions and not for routine access to the flight deck. As such, aircraft electronic keypads or electronic pushbuttons installed in the cabin must be used only in emergency situations. (The only time the crew may use the emergency flight deck access procedure during normal operations is when the aircraft is on the ground, the flight deck door is closed and locked, and the flight deck is unoccupied.) Additionally, § 121.313(g) states, in part, “...no person other than a person who is assigned to perform duty on the flight deck may have a key to the flight deck door.” Therefore, any keys in the possession of cabin crewmembers that are used for opening bins or containers in the cabin cannot be capable of unlocking the flight deck door.

   2) Unless an air carrier has FAA-approved procedures under § 121.587(b), the flight deck door must remain closed during flight time. In order to operate the flight deck door during flight time and permit flight deck access by persons authorized in accordance with § 121.547, part 121 certificate holders must develop and use FAA-approved procedures regarding the opening, closing, and locking of the flight deck door. These FAA-approved procedures should be included in the operators’ operations and F/A manuals. Additionally, § 121.313 requires any associated signal or identity confirmation system to be easily detectible and operable by each flightcrew member from his or her duty station. To meet security needs of accomplishing an audio and visual identification, one person on the flight deck is required to visually identify the person seeking access through the viewing port or viewing device.

   **B. Certificate Holders’ Procedures.** Certificate holders’ procedures must include at least the following:

   1) Normal procedures for opening flightcrew compartment doors, to include:
a) Who is authorized to have access to the flight deck.

b) How a crewmember verifies the identity of a person requesting access to the flight deck. This process must include a positive means for flight crew members to identify persons requesting entry to the flight deck and to detect suspicious behavior or a potential threat before unlocking the flight deck door. To meet security needs of accomplishing an audio and visual identification, one person on the flight deck is required to identify visually the person seeking access through the viewing port or viewing device.

c) How flight deck door keypad access codes are disseminated (e.g., flight deck door keypad access codes may be disseminated through the certificate holder’s normal manual process).

d) F/A procedures to verify that there are no passengers in any forward lavatory, and that no passengers are standing in the area surrounding the flight deck door.

e) F/A procedures for blocking the passenger aisle when the flight deck door is opened.

f) Procedures to ensure two persons are always on the flight deck. For two-person flight crews, this means when one flight crew member leaves the flight deck, another individual that is qualified in accordance with § 121.547(a)(1–3), such as an F/A, must be present to lock the door and remain on the flight deck until the flight crew member returns to his or her station.

2) Emergency electronic keypad or emergency pushbutton procedures, to include:

a) Events requiring the use of emergency procedures (i.e., pilot alerts).

b) Determining when the flight crew is, or is suspected of being, incapacitated, or there is no response from the flight deck.

c) Keeping the flight deck door locked until an audio and visual verification of the person requesting entry is made.

d) How to determine whether a person requesting access is under duress.

e) How to determine when the flight deck door locking system may be taken out of the deny access position.

f) Flight deck crew procedures to follow when an electronic keypad or pushbutton is being used to gain unauthorized access to the flight deck.

g) When the flight crew must take immediate action to deny access to the flight deck.

3) Crewmember training programs should include these procedures, associated crewmember duties and responsibilities, crew coordination, and emergency situation training modules in appropriate curriculum segments.

C. POI Approval Process. To comply with § 121.587(b), POIs are to review and approve their assigned certificate holders’ procedures in accordance with the current approval process found in this order and the guidance provided in this paragraph.

3-48 INTERNATIONAL AIR TRANSPORT ASSOCIATION OPERATIONAL SAFETY (IOSA) AUDITS—ACCESS TO FLIGHT DECK.
Media Statement

Wellington March 27 2015

CAA tightens flight deck safety procedures

Following reports that have emerged regarding the tragic Germanwings incident in the French Alps, The Civil Aviation Authority is working closely with New Zealand based operators to review procedures relevant to: (1) the minimum number of people in the flight deck at any given time; and (2) the ongoing updating of medical checks and reports back to the CAA.

Acting Director of Civil Aviation, John Kay said ‘Effective today the CAA requires large jet aircraft operators in New Zealand to ensure they have a minimum of two people in the flight deck at any given time. This applies to domestic and international flights. This new stipulation recognises that temporary inflight incapacitation could occur for a number of reasons, including a medical event.’

‘The CAA takes a precautionary approach on such matters in the interests of safety.’

‘All New Zealand airline pilots undergo extensive and recurrent medical assessments to determine their fitness to hold a licence. As part of this, aeromedical examiners are required to assess a commercial pilot’s physical and mental health at each medical examination which, for an airline pilot flying with at least one other pilot, is undertaken annually. These detailed medical assessments are in-line with international aviation standards.’ Mr. Kay said.

‘The CAA’s stance is that flight crew need to be medically fit in order to fly.’ He said.

‘Our view is also that well treated medical conditions, in established remission, and/or those conditions that are well managed by taking reliably safe medication, may be eligible to return to aviation.’ Mr. Kay said

‘A pilot’s medical certificate can be suspended while determining their medical fitness to fly. It is unlikely that someone who has a medical or behavioural condition of concern would be considered as being fit to hold a medical certificate.’ (Relevant medical requirements are below).

In addition, to hold a licence a pilot must remain ‘fit and proper’. When assessing an individual’s fit and proper status the Civil Aviation Act allows the Director of Civil Aviation to take into account any history of mental health of serious behavioural problems.

‘As with medical certificates the CAA will always take a precautionary approach on such matters.’

Mr. Kay concluded ‘We will closely monitor the situation as the Germanwings investigation continues and review our current requirements if any need improving or updating.’

ENDS
Looking at the law
Civil Aviation Rule Part 67: Medical Standards

Rules 67.103(c) (Class 1), 67.105(c) (Class 2), and 67.107(c) (Class 3) contain the main medical standards relating to depression. Those standards include a reference to the term “aeromedical significance” which is expanded further in Rule 67.3(a): “A medical condition is of aeromedical significance if, having regard to any relevant general direction, it interferes or is likely to interfere with the safe exercise of the privileges or the safe performance of the duties to which the relevant medical certificate relates”.

In the class 1 medical standards rule 67.103(c) requires that an applicant –

(1) have no history or diagnosis of any neurological, neurosurgical, psychiatric or psychological condition, or behavioural or cognitive disorder that is of aeromedical significance; and

(2) without limiting paragraph (c)(1), have no history or diagnosis of any of the following specific medical conditions, to an extent that is of aeromedical significance:

   (iv) psychiatric condition;
   ...
   (vii) mental abnormality or neurosis;
   (viii) depression;
   ...

(3) without limiting paragraph (c)(1), have no history or diagnosis of epilepsy or any other condition associated with an elevated risk of convulsions;

(4) have no history or diagnosis of the use of any psychoactive substance that, having regard to any relevant general direction, interferes or is likely to interfere with the safe exercise of the privileges or the safe performance of the duties to which a class 1 medical certificate relates; and

(5) not be taking any psychoactive substance that, having regard to any relevant general direction, interferes or is likely to interfere with the safe exercise of the privileges or the safe performance of the duties to which a class 1 medical certificate relates.
SAFETY ALERT 08 / 2015

Issued: 02\textsuperscript{nd} April 2015

SUBJECT:
Crew members at stations

REFERENCE PUBLICATION:
CAR-OPS 1.310
CAR-OPS 1.1255

CATEGORY:
Attention and Recommendation

APPLICABILITY:
All UAE AOC/POC Holders

Description:

There is a need to further enhance the requirements on crew members at stations as stated in CAR-OPS 1.310 following recent events that affected aircraft safety.

As mandated by CAR-OPS 1.310, each flight crew member required to be on flight deck duty shall remain at his station unless his/her absence is necessary for the performance of his/her duties in connection with the operation, or for physiological needs provided at least one suitably qualified pilot remains at the controls of the aeroplane at all times.

Recommendation:

After reassessment of the above rule and following internal and external consultation, the GCAA recommends the following:

1. Operators to re-assess the safety and security risks associated with flight crew members leaving the flight crew compartment due to operational or physiological needs during non-critical phases of flight.

2. Flight crew members required to be on flight deck duty should take all necessary precautions to limit their absence from the cockpit.
3. If deemed necessary and based on the assessment, operators may implement procedures on two-person cockpit rule requiring at least two persons to be in the flight crew compartment at all times. The relief person can be any member of the flight crew or cabin crew or an engineer.

4. However, it is important to stress that persons other than flight crew allowed in the cockpit do not introduce a different risk into the flight deck given that cabin crew or engineer, under normal circumstances, do not receive the same training to operate the lock/unlock means of the cockpit door and on the cockpit door surveillance system required by CAR-OPS 1.1255.

5. Any additional risks stemming from the introduction of such procedures or measures should be assessed and mitigated through the management of change process under the AOC/POC SMS.

Contacts:
fops@gca.gov.ae
Interim Order No. 3 Respecting Flight Deck Occupants

Under the Canadian Aviation Regulations, Part 7, an aeroplane must have a door between the flight deck and the passenger compartment and these doors must be able to be locked. The Interim Order no. 3 makes sure that at least one person can unlock the door manually should it become impossible to unlock it through other means. It defines the two occupants as one flight crew member and one of the persons already authorized by the Minister of Transport admittance to the flight deck.

Effective: Interim Order No. 3 Respecting Flight Deck Occupants has received Governor-in-Council approval to be extended for one year. This Order is, therefore, effective until April 22, 2016.

Applicability: The order applies to Canadian commercial airlines certified under Part 7, subpart 5 of the Canadian Aviation Regulations carrying passengers (705 operators). In addition, Interim Order
no. 3 also applies to foreign commercial airlines operating in Canadian airspace certified under Part 7, subpart 1, of the Canadian Aviation Regulations carrying passengers (701 operators). Interim Order no. 3 does not apply to cargo or passenger-cargo combination aircraft.

**Guidance Material:** *Advisory Circular 0215 – Flight Deck Door Regulations*

Whereas the annexed *Interim Order No. 3 Respecting Flight Deck Occupants* is required to deal with a significant risk to aviation safety and the safety of the public;

And whereas, pursuant to subsection 6.41(1.2) \(^a\) of the *Aeronautics Act\(^b\)*, the Minister of Transport has consulted with the persons and organizations that the Minister considers appropriate in the circumstances concerning the annexed *Interim Order No. 3 Respecting Flight Deck Occupants*;

Therefore, the Minister of Transport, pursuant to subsection 6.41(1) \(^a\) of the *Aeronautics Act\(^b\)*, makes the annexed *Interim Order No. 3 Respecting Flight Deck Occupants*.

*Ottawa, April 22, 2015*

Lisa Raitt  
Minister of Transport

\( ^a\) S.C. 2004, c. 15, s. 11(1)  
\( ^b\) R.S., c. A-2

**INTERIM ORDER NO. 3 RESPECTING FLIGHT DECK OCCUPANTS**

**Terminology — Canadian Aviation Regulations**

1. Unless the context requires otherwise, words and expressions used in this Interim Order have the same meaning as in subsection 101.01(1) of the *Canadian Aviation Regulations*.

**Application**

2. (1) Subject to subsection (2), this Interim Order applies in respect of  
(a) the operation of an aeroplane by an air operator under Subpart 5 of Part VII of the *Canadian Aviation Regulations* in a passenger-carrying air transport service;  
and  
b) the operation in Canadian airspace of a passenger-carrying aeroplane, in respect of which a type certificate has been issued authorizing the transport of 20 or more passengers, by a foreign operator under a Canadian foreign air operator certificate or a flight authorization issued by the Minister under paragraph 701.10(a) of the *Canadian Aviation Regulations*.

**Exemption**

(2) This Interim Order does not apply in respect of an aeroplane that has a Class F cargo compartment located on the main deck between the flight deck and the passenger cabin.

**Flight deck occupants — air operators**

3. (1) An air operator must ensure that, if a flight crew member leaves the flight deck during flight time, one flight crew member and one other authorized person are present on the flight deck while the flight crew member who left the flight deck is absent.

**Authorized persons**

(2) For the purposes of subsection (1), an authorized person is  
(a) a flight crew member;  
(b) a crew member;  
c) a Department of Transport air carrier inspector who presents an official identity card to the pilot-in-command of the aeroplane;

(d) an employee of the air operator who is not a crew member;
(e) a pilot, flight engineer or flight attendant employed by a wholly owned subsidiary or a code
share partner of the air operator;
(f) a person who has expertise related to the aeroplane, its equipment or its crew members and who
is required to be in the flight deck to provide a service to the air operator; or
(g) a person who is exempted from the application of subsection 705.27(3) of the Canadian Aviation
Regulations by the Minister under subsection 5.9(2) of the Act.

Flight deck occupants – foreign operators

4. (1) A foreign operator must ensure that, if a flight crew member leaves the flight deck during
flight time, one flight crew member and one other authorized person are present on the flight deck
while the flight crew member who left the flight deck is absent.

Authorized persons

(2) For the purposes of subsection (1), an authorized person is
(a) a flight crew member;
(b) a crew member;
(c) an inspector of the civil aviation authority of the state where the aeroplane is registered;
(d) a Department of Transport air carrier inspector who presents an official identity card to the pilot-
in-command of the aeroplane;
(e) a person who has expertise related to the aeroplane, its equipment or its crew members and who
is required to be in the flight deck to provide a service to the
foreign operator; or
(f) a person who is exempted from the application section 701.28 of the Canadian
Aviation Regulations by the Minister under subsection 5.9(2) of the Act.

Conflict

5. If there is a conflict between the Canadian Aviation Regulations and this Interim Order, this
Interim Order prevails to the extent of the conflict.

REPEAL

6. Interim Order No. 2 Respecting Flight Deck Occupants, made on April 10, 2015, is
repealed if this Interim Order is made before Interim Order No. 2 Respecting Flight Deck
Occupants ceases to have effect.

Date modified: 2015-06-25

Government of India  
Directorate General of Civil Aviation  
AV. 15011/2/2010  

Annexure 6

Air Safety Circular No. 3 of 2010

Subject: Manning of Cockpit during Non Critical Phases - Standard Procedures.

The Flight Crew Operations Manual (FCOM) and Safety and Emergency Procedures (SEP) Manual of all aircraft/ Operators requires that at all given times the Cockpit has to be manned by minimum crew compliment.

In case one of the crew members has to leave the cockpit during the non critical phases of flight the cabin crew is required to be inside the cockpit and occupy the observer seat. In no case the cabin crew will occupy the seats meant for Cockpit crew.

It is to reiterate that in case one pilot leaves the flight deck, cabin crew shall be in the flight deck and will occupy one of the observer seats. The cabin crew in the flight deck will remain vigilant in case of subtle incapacitation of the flight deck crew or any other situation that requires assistance. The procedure to be followed is as follows:

- Prior to opening the Flight Deck door, the forward galley area should be free of passengers and the curtain between the galley and cabin is closed.
- The absence should be restricted to the minimum time necessary.
- The flight deck door is locked whilst crew member is absent.
- The forward galley area must remain sterile during the absence from the flight deck.
- The crew member returning to the flight deck should follow the entry request procedure.

The pilot remaining in the cockpit shall wear shoulders harness, and headset and maintain high level of alertness, and situational awareness. He should have an unobstructed access to the flight controls.

The cabin crew shall remain in the flight deck till such time the flight deck crew member returns to the flight deck.

The above is for strict compliance.

Sd/-
(Bir Singh Rai)
Director Air Safety
for Director General of Civil Aviation

Dated: 01st June, 2010

To: All Aircraft Operators
Internal distribution as per list.