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WORKING PAPER

ASSEMBLY — 41ST SESSION

TECHNICAL COMMISSION

Agenda Item 31: Aviation Safety and Air Navigation Standardization

MEDICAL CERTIFICATION AND MENTAL ILLNESS

(Presented by Australia)

EXECUTIVE SUMMARY

The global burden of disease due to mental ill health is higher than that of any other illness. We know the prevalence of mental ill health in the aviation community is higher than in the general population; however, the declaration of this illness by medical certificate-holders remains rare. Key barriers to the declaration by individuals of mental illness and its management in aviation include the stigma of perceived personal failing accompanying the diagnosis and fear of having their aviation medical certificate restricted, suspended, or cancelled. These issues are increasing in aviation due to the impacts of the COVID-19 pandemic. It is therefore timely to examine the current approach to medical certification of mental illness. This paper proposes a move away from the traditional pathogenic disease-based approach to a salutogenic model that supports the individual experiencing mental ill health to maintain engagement in the aviation industry and to access the support this community brings

Action: The Assembly is invited to:

a) note the traditional pathogenic approach to aviation medical certification in the case of mental illness is a significant barrier to certificate-holders seeking help or disclosing their illness;
b) request ICAO to develop guidance to assist risk assessment and decision-making by medical examiners and regulators that would under appropriate circumstances permit the safe early return or continuation in a flying role of individuals diagnosed with mental illness;
c) support States utilising ICAO guidance to develop evidence-based, risk-informed and peer-supported aeromedical decision-making tools that include alternatives to aviation medical certificate suspension and cancellation

Strategic Objectives:	This working paper relates to the Safety Strategic Objective.
Financial implications:	Nil
References:	Doc 8984, *Manual of Civil Aviation Medicine* WHO World Mental Health Report 2022[1] FAA Human Intervention and Motivation Study

[1] World mental health report: Transforming mental health for all (who.int)

1. INTRODUCTION

1.1 It has been established for many years the global burden of disease due to mental health is the highest contributor to years of life lost due to disability, and reduction in the global rate of suicide is one of the World Health Organizations (WHO) Sustainable Development Goals.

1.2 It is also acknowledged this burden is under-reported both due to the data collected, but more importantly due to the social and cultural reluctance of people to declare they have problems with their mental wellbeing. In the aviation community, this has been even more significant with the paradigm of an aviator needing to be made of the "right stuff" to be able to be part of this community, let alone to thrive and succeed.

1.3 In more recent years the "personal failure" approach to mental ill health has been replaced to a moderate degree by the pathogenic model of disease. This has been a step forward in acknowledging that the mental state is a part of the human condition, as captured by the simple but effective statement of the title of the United Kingdom's National Health Service's mental health strategy: "No health without mental health".

1.4 Aviation medical examiners (AME) have in the last few decades adopted a much more medical model of assessment, diagnoses and management. In the Fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) and the WHO's Eleventh Revision of the International Classification of Diseases (ICD-11) a set of criteria which, when met (or not), means one is or isn't diagnosed with a mental illness. Aviation medical professionals use questionnaires, checklists, outcome measures to define an applicant's mental health, its severity and prognosis. Regulators use these to inform quantitative research in support of interventions and medications to fix this pathology, with parallels drawn to the way we manage other chronic diseases like asthma, diabetes or heart failure.

1.5 AMEs also use these pathogenic, criterion-based medical approaches to aeromedical certification, to determine the presence or absence of disease when suspending or reinstating a medical certificate. This approach has been considered to be the safe option for decades, but it is becoming increasingly apparent in global health data, this model is not the safest approach.

1.6 This paper proposes a new approach to medical certification in mental health, based on the salutogenic principle of human wellbeing.

2. DISCUSSION

2.1 The pathogenic model of defining mental illness has been important in supporting the acknowledgement and acceptance of the presence of mental illness at community and individual levels. Normalising the presence of a broad spectrum of diverse symptoms has driven life-saving narratives in Australia through initiatives such as "R U OK day", and the growth of information and support from organisations such as BeyondBlue and the Black Dog Institute.

2.2 This increased acceptance has also supported the move towards acknowledging the message that "it's OK not to be OK", which links into the concept that every person may experience features of mental ill health at any stage, without necessarily having a diagnosis. This extends into the encouragement of accessing advice and support, without necessarily needing therapeutic intervention for a disease. This is the underpinning principle for the salutogenic approach to mental health and illness.

2.3 Mental health is not a binary sick/not sick status (pathogenic approach), rather it is a continuum of well / less well / illness.

2.4 The retention of the pathogenic approach to mental illness forms a barrier to aviation safety. Current medical standards and certification are built on the pathogenic, binary well/not well (fit/not fit) approach. If an applicant is not well and fit for certification, the current approach is, they must be sick and not fit for certification. The middle ground, where someone is not entirely well, but not yet meeting the criteria for a diagnosis or requiring therapy, is currently inaccessible to certificate-holders. They are therefore less likely to seek help or accept help offered to prevent further deterioration and build capacity to respond to mental distress. Their mental status is therefore more likely to deteriorate such that they become increasingly unwell. People who are experiencing distress and symptoms will keep flying, controlling airspace, or exercising other privileges while potentially impaired by remaining untreated, or while being treated with interventions that are not safe or effective – just to be able to retain their certificate.

2.5 Rather than continue to see certificate-holders deny their illness, avoid treatment and operate while unwell and potentially impaired, it is safer to fly while being treated and supported by their peers and their industry, under appropriate circumstances. In the same way AMEs now permit certification with diseases that historically would have precluded certification, it is appropriate to revisit our approach to certification with mental illness. The Human Intervention and Motivation Study (HIMS) program with the United States Federal Aviation Administration has clearly demonstrated that the salutogenic approach to complex biopsychosocial conditions in the aviation environment can successfully support certificate-holders to acknowledge and declare their symptoms or illness, and effectively engage in treatment.

2.6 Australia has developed a proposed model of medical certification for certificate-holders experiencing mental distress that is responsive to the individuals needs and status of the person, is supported through a peer network established by the Regulator, with oversight and governance of the system and processes by the Regulator.

2.7 By using a peer network, Australia is following the proven HIMS approach, building on trust between the certificate holder and a suitably qualified peer who understands the context of their flying or operational role at the same time as having an objective appreciation of the safety of this person at this point in time. The peer is in turn supported by a panel of aerospace medicine and mental health specialists who are appointed by the Regulator to make real-time responsive recommendations about the subject's fitness for aviation duties in consultation with the peer and treating clinicians. The Regulator remains at arms-length as long as the person is compliant with the terms of the program and the directions of the panel and peer, formalised as conditions on a medical certificate. In this program, the person retains their medical certification and their fitness to fly with, conditions, restrictions and limitations responsive to their current status. This does not preclude the assessment and subsequent cancellation or suspension of an individual's aviation medical approvals/ certifications should the results of risk assessment warrant such action.

2.8 Trust is paramount to this model, consistent with the principles of Just Culture. The Regulator trusts the certificate holder to be open and honest in their disclosure of symptoms and compliance with the direction of their peer and overseeing panel. The certificate holder trusts the Regulator not to intervene unless there is a clear and immediate hazard to the safety of air navigation due to severity of symptoms (on the advice of the panel or peer), or non-compliance with the requirements of the program. Verification of trust, is delivered in the form of audit and oversight by the Regulator. This

includes ensuring that peers and panelists are suitably qualified and current, and acting within the scope of their role; the delivery of the program includes appropriate schedules and reporting of peer engagement by the certificate-holder; and a longer-term post-implementation review through stakeholder engagement and data review regarding reporting and success of the model over time.

3. CONCLUSION

3.1 The first step in enacting meaningful and sustainable change in the mental health of the aviation community is to acknowledge this is a real, current and significant problem for which the historical approach of the pathogenic model to certification may no longer be fit for purpose.

3.2 It is important therefore that a significant first step in making a change is to acknowledge our traditional approach is not best suited to achieving the dual goals of aviation safety and management of the industry's burden of mental illness.

3.3 ICAO and States can take steps to review current programs and methodologies to find ways to implement new approaches that bring greater industry and individual engagement, and therefore greater safety. Each State will have very different cultural acceptance of the principles and risk appetite for change in the presence of mental ill health, and will require different resources and approaches to review and implementation if and when they are ready to implement change.

3.4 The support of ICAO through mechanisms such as expert panels, working groups and advisory bodies is imperative to supporting a consistent, global and safe approach for all.

3.5 ICAO's endorsement of further development work on the salutogenic principle will enable each nation to review and implement their desired approach to medical certification in the presence of mental ill-health using evidence-based, safety-informed, internationally accepted principles.

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