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Mental Health Assessment and Regulatory Approaches in Aviation: Current Practices, Challenges, and Future Directions

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ABSTRACT

Mental health is a core determinant of aviation safety, impacting cognitive function and decision-making in safety-critical roles. High operational workloads, fatigue, and circadian disruption may increase vulnerability to anxiety, depression, substance misuse, and other mental health conditions.Historically, diagnosis-based exclusion policies have contributed to stigma and reluctance to disclose symptoms, creating a disclosure gap that may delay treatment and compromise safety.This narrative review evaluates global mental health assessment methods and regulatory frameworks across civilian, military, and spaceflight sectors, outlining an implementation roadmap for Iraq. Synthesizing standards from International Civil Aviation Organization (ICAO), the Federal Aviation Administration (FAA), and European Union Aviation Safety Agency(EASA), alongside forensic accident data highlights a global shift toward performance-based functional assessments and non-punitive peer support programs (PSPs). Forensic findings show that acute, reactive life crises often precipitate sudden operational risks that traditional periodic exams fail to detect. Given Iraq's unique environmental challenges and ongoing sector modernization, this paper recommends integration of a standardized aeromedical screening checklist, providing specialized examiner training, and the explicit incorporation of psychological hazards within airline Safety Management Systems (SMS) to support early intervention and protect operational safety within the Iraqi aviation context.

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Keywords: *Aviation medicine; mental health; Iraq.*

1. Introduction

Mental health is a critical determinant of aviation safety, influencing decision-making, situational awareness, cognitive performance, and operational reliability among aviation personnel. Traditional diagnosis-based regulatory approaches often contributed to stigma and underreporting, whereas modern frameworks increasingly emphasize functional assessment, treatment stability, and risk-based certification [1–6]. Despite these advances, challenges remain, including regulatory variation, emerging technological demands, and limited mental health resources in developing aviation systems such as Iraq. These factors highlight the need for evidence-based mental health assessment and standardized regulatory approaches that balance safety, operational effectiveness, and individual well-being.[1–7,13]

2. Aim of the Study: This narrative review aims to evaluate current mental health assessment practices and regulatory approaches in aviation medicine, examine the epidemiology and operational implications of psychiatric disorders and mental incapacitation events, and identify future strategies for risk management, medical certification, and return to duty. Particular emphasis is placed on practical recommendations for developing aviation systems, including Iraq, and on an author-developed aeromedical mental health checklist designed to support structured assessment and appropriate referral.

3. Methods: This study was conducted as a best-evidence narrative review integrating literature on aviation mental health, clinical psychiatry, occupational health, and aviation safety. The review drew on epidemiological studies, international aviation regulatory guidance documents from the International Civil Aviation Organization (ICAO), the Federal Aviation Administration (FAA), and the European Union Aviation Safety Agency (EASA), research on organizational safety, military aviation literature, studies of psychological risks associated with spaceflight, and publications concerning passenger mental health [1–17]. Eligible sources addressed psychiatric disorders, functional impairment, medical certification frameworks, risk assessment, and emerging technologies relevant to aviation safety. Evidence was synthesized thematically to compare regulatory approaches, clinical practices, and safety implications, with particular attention to challenges and potential applications in developing aviation systems, including Iraq.

4. Conceptual Framework and Regulatory Models

Mental health in aviation is viewed as a continuum ranging from optimal well-being to severe impairment, with even mild psychological distress potentially affecting judgment, situational awareness, communication, and operational performance.

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Modern aeromedical practice therefore emphasizes functional capacity assessment rather than diagnosis alone, focusing on an individual's ability to safely perform aviation duties [1–6,13].

Regulatory approaches have progressively shifted toward prevention and risk-based management. ICAO provides a global framework that focuses on prevention, early intervention, and protection against performance impairment [1–3]. EASA mandates psychiatric assessment when indicated and strongly promotes peer support programs to reduce stigma and encourage early help-seeking [6,7,14]. The FAA relies primarily on functional assessment and Special Issuance pathways, allowing certification of individuals with treated and clinically stable psychiatric conditions under structured monitoring [4,5]. Military aviation systems similarly emphasize resilience, psychological fitness, and confidential support mechanisms [13]. Despite these advances, developing aviation systems, including Iraq, continue to face challenges related to limited psychiatric expertise, underreporting, and the absence of comprehensive aviation mental health policies [1–3,13].

5. Assessment Methodologies and Risk Models in Aviation Mental Health

Aviation mental health assessment is now an integrated, multi-layered system detecting psychiatric disorders and subtle functional decline threatening flight safety. Traditional evaluations rely on history, disclosure, interviews, and exams, but are limited by underreporting due to fear of certification loss [4,6,10]. Structured assessments by aviation-trained specialists should cover psychiatric/medical history, symptoms, treatment, medications, sleep/fatigue, substance use, occupational stressors, and psychosocial circumstances, plus suicide risk, insight, judgment, cognition, adherence, and relapse risk where indicated [4–7]. Findings must be interpreted relative to specific safety-critical duties; fitness is determined by functional impairment, individual risk, and regulations—not diagnosis alone [4–7]. Standardized tools (PHQ-9, GAD-7, AUDIT-C, ESS, PCL-5) and cognitive/simulation testing support, but do not replace, comprehensive clinical assessment, with results interpreted by qualified professionals within operational and regulatory context [4–7,15,16]. Peer/supervisor observations (withdrawal, irritability, fatigue, sleep disturbance, reduced performance, unusual behavior, conflict, recurrent errors) should prompt proportionate assessment and referral, not be treated as diagnostic evidence. Peer Support Programs and non-punitive reporting facilitate early help-seeking, depending on trust, confidentiality, training, and separation from disciplinary procedures except where safety/legal obligations require escalation [1,2,6,11,14]. Military aviation uses continuous, operationally focused assessment combining selection screening, repeated fitness evaluations, psychometric/resilience testing, and multidisciplinary aeromedical boards with peer monitoring and just culture [13,19]. Civil and military systems converge toward functional, performance-based models emphasizing cognitive capacity, behavioral stability, treatment effects, and safe performance over diagnosis alone, while remaining evidence-informed and regulation-consistent [1–7,13]. Mental Incapacitation Events (MIEs) are rare but serious acute/progressive psychological deteriorations impairing safety-critical duties, from panic/psychosis to gradual depression-related decline [13]. Risk management uses stratification by clinical history, functional impairment, treatment adherence, relapse risk, substance misuse, and occupational stress, with continuous monitoring of fatigue and behavioral change including peer reporting [1,2,4–7,14].

Objective tools (neurocognitive testing, simulation-based performance assessment, standardized psychological scales, structured behavioral observation) evaluate functional capacity, though limitations persist due to sensitivity variability, potential concealment, and lack of robust longitudinal data [15,16].

6. Ethical and Legal Considerations

Aviation mental health assessment involves balancing individual rights, confidentiality, and the responsibility to protect operational safety. Confidentiality supports trust and encourages early help-seeking, but it may be subject to defined exceptions when there is a serious safety concern or a legal reporting obligation. Personnel should understand the purpose of an assessment, how information will be used, who may access it, and the circumstances under which disclosure may be required [12].

Clear informed consent and transparency are therefore essential, ensuring aviation personnel understand not only what is assessed, but also how findings may influence certification and reporting decisions [12].

Within this framework, a just culture approach is central, encouraging open reporting of psychological vulnerability without fear of punishment, and shifting safety systems away from blame toward early support and intervention [11,18,19].

Ethical practice also demands fairness, challenging traditional diagnosis-based exclusion in favor of functional, individualized assessment that distinguishes illness from impairment in real-world performance [4–6,12].

Together, these principles aim to preserve both safety and dignity, ensuring decisions are evidence-based, proportionate, and free from unnecessary stigma or discrimination [12,19].

7. Epidemiology of Mental Health Disorders and Mental Incapacitation Events in Aviation

Epidemiological evidence shows a substantial mental health burden in aviation, with rare but high-impact Mental Incapacitation Events (MIEs) [8,9,13]. Among civilian pilots, studies report depressive symptoms ~13%, anxiety 4–12%, and suicidal ideation ~4%; during COVID-19, a European survey of 1,220 pilots found anxiety ~25%, depression 13%, and hazardous alcohol use ~40%—figures reflecting specific samples and screening methods, not universal prevalence [8,9]. Cabin crew face fatigue, burnout, circadian disruption, emotional labor, and passenger-related stress; fear of flying affects ~3–8% of passengers [8,17]. Military aviation shows low diagnosed disorders (~3.1%) due to strict selection, but confidential data indicate higher anxiety, depression, PTSD, and substance misuse, suggesting underreporting [13]. Spaceflight personnel have low baseline prevalence but face isolation, confinement, circadian disruption, family separation, and long-duration mission risks [13]. Regional variation exists: depressive/anxiety symptoms in 12–13% of pilots in Europe/North America, 17–23% in some Asia-Pacific studies, and elevated rates in parts of the Middle East [8,9]. A major disclosure gap exists: over 50% of pilots avoid mental healthcare due to certification concerns, and only ~1 in 10 symptomatic military personnel receive treatment [10,13]. Data from 17 fatal accidents (576 fatalities) show MIEs are rare but critical: reactive incapacitation (47%) from acute stressors, and clinical incapacitation (53%) including acute psychosis (23%), mood/substance disorders (18%), and panic/anxiety (12%) [8,13].

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Overall, severe psychiatric illness is uncommon in formal records, but subclinical symptoms and acute stress reactions are common and operationally significant, highlighting limitations of periodic screening and supporting continuous monitoring, peer support, confidential reporting, and structured return-to-duty pathways [8–14].

8. Aviation Psychiatry: Clinical and Certification Frameworks

Aviation mental health disorders are best understood through their impact on functional performance rather than diagnosis alone, as even mild symptoms can affect attention, working memory, decision-making, emotional regulation, and stress tolerance—core capacities required for safe flight operations. Modern aeromedical practice therefore prioritizes functional capacity, risk assessment, and longitudinal stability over categorical diagnosis [4–7,13].

Common conditions show distinct operational profiles. Stress and adjustment disorders frequently arise from fatigue, circadian disruption, and operational pressures, leading to reduced vigilance and attention lapses. Depression may impair cognition, motivation, and judgment, increasing procedural errors and, in severe cases, suicide risk. Anxiety disorders can narrow attention and reduce cognitive flexibility, with panic episodes posing acute in-flight safety concerns. PTSD, often linked to accidents or combat exposure, affects sleep, concentration, and stress tolerance. Substance misuse disorders significantly impair reaction time and judgment and typically require sustained rehabilitation before return to duty. Psychotic disorders carry a high risk of sudden incapacitation and are generally incompatible with aviation roles. Personality and behavioral dysregulation can undermine teamwork, communication, and crew resource management, increasing systemic safety risks [4–7,13].

Management of these conditions sits at the intersection of clinical care, operational safety, and regulatory oversight. Aviation psychiatry is preventive in nature, aiming for early detection, timely intervention, and preservation of occupational function, where grounding is considered a temporary safety measure rather than career termination. Fear of certification loss remains a major barrier to care, making confidential treatment pathways and structured return-to-duty programs essential for reducing stigma and improving early reporting [10,12,13]. Aeromedical management relies on a multidisciplinary system involving aviation medical examiners, psychiatrists, psychologists, occupational specialists, and regulators. Evidence-based psychotherapy—particularly cognitive behavioral therapy—is preferred for preserving cognitive performance, while pharmacological treatment is used cautiously due to potential effects on alertness and reaction time. SSRIs may be permitted under controlled special issuance pathways, whereas sedatives and antipsychotics are generally disqualifying [4,5,13].

Certification decisions typically follow a graded framework ranging from unrestricted fitness to temporary or permanent unfitness, with increasing emphasis on restricted certification models that allow safe, monitored return to work. Return-to-duty decisions depend on symptom stability, relapse risk, treatment adherence, and cognitive performance, supported by longitudinal monitoring and peer support systems [4–7,11,14].

Across civil aviation, there is a clear shift toward integrated, functional, and risk-informed aeromedical systems that prioritize safety while maintaining workforce sustainability.

In Iraq and similar developing aviation systems, key challenges include limited specialist infrastructure, lack of standardized protocols, and stigma-related underreporting. Strengthening these systems requires structured referral pathways, ICAO-aligned certification frameworks, special issuance programs, and confidential support mechanisms to ensure both safety and continuity of care [1–7,13].

9. Organizational Integration of Mental Health within SMS

Mental health is now recognized as an essential aviation safety factor and should be formally integrated into ICAO Safety Management Systems (SMS) as an operational hazard shaped by fatigue, workload, leadership, and organizational culture [1–3,20]. Embedding a Just Culture is fundamental to reducing stigma and encouraging early reporting of psychological distress without fear of punishment, thereby improving both safety and early intervention [11,18,19].

Peer Support Programs offer confidential, non-punitive pathways for early identification of distress, facilitating timely referral and structured return-to-duty [11,14]. Fatigue Risk Management Systems (FRMS) complement this by addressing sleep disruption and fatigue-related cognitive and emotional impairment, which are key contributors to mental health vulnerability [1,3,20].

In addition, Critical Incident Response Systems (CIRS) provide immediate psychological support and structured follow-up after traumatic events, ensuring recovery monitoring and safe operational reintegration [17,20]. Clear separation between supportive and disciplinary processes, alongside well-defined confidentiality rules, is essential to reduce the "disclosure gap" and strengthen trust within aviation organizations [11,12,14,19].

Overall, effective SMS integration requires a coordinated, system-level approach combining cultural change, fatigue management, peer support, and structured psychological response mechanisms to enhance both workforce resilience and aviation safety [1–3,11,14,20].

10. Aviation Populations and Special Groups

Mental health risk management in aviation must address the full spectrum of aviation professionals, each operating under distinct psychological and operational demands. Flight crew face fatigue, irregular schedules, and high-stakes decision-making, making early detection of depression, anxiety, substance misuse, and suicidal ideation essential [8–10,13]. Air traffic controllers ATCs work under sustained cognitive load and time pressure, where even mild psychological impairment can affect situational awareness and safety-critical judgment [13]. Cabin crew experience emotional labor, shift disruption, and passenger conflict, contributing to burnout, anxiety, and reduced emergency performance [8,13].

Other operational groups also carry significant risk. Maintenance and engineering personnel face fatigue and responsibility for safety-critical technical work, where errors may have delayed but severe consequences [18,20]. Flight dispatchers and operational control staff manage complex real-time decisions under stress, while airport security and ground staff are exposed to continuous operational pressure and burnout risk [13]. Emergency aviation personnel, including medevac and search-and-rescue crews, face repeated trauma exposure with elevated risk of PTSD and depression [13,17].

Specialized populations include military aviation personnel, who experience high operational stress, trauma exposure, and persistent healthcare avoidance due to career concerns,

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requiring structured monitoring and confidential support systems [10,13]. Spaceflight personnel face unique risks from isolation, confinement, and circadian disruption during long missions [13]. Passengers, particularly vulnerable groups, may experience anxiety, panic, or psychiatric emergencies that increase cabin workload and operational complexity [17].

In Iraq, additional challenges include limited mental health infrastructure, stigma, and trauma exposure, reinforcing the need for integrated civil–military collaboration, peer support systems, and confidential reporting mechanisms aligned with ICAO standards [1–3,13,14].

11. Passenger Mental Health and Public Health Interface

Passenger mental health is an important dimension of aviation safety and operational resilience. Fear of flying affects approximately 3–8% of passengers, presenting as anxiety, panic attacks, and avoidance behaviors that may escalate cabin stress and occasionally lead to in-flight disruptions [17]. Evidence-based interventions such as cognitive behavioral therapy and exposure-based approaches are effective, alongside crew training in anxiety management and passenger reassurance [17].

In-flight psychiatric emergencies—including panic attacks, psychosis, intoxication, aggression, or suicidal behavior—require structured protocols for early recognition, de-escalation, medical consultation, and diversion decision-making. These events place significant demands on cabin crew and operational coordination [17].

Broader system stressors, including pandemics such as COVID-19, have demonstrated how public health crises amplify anxiety, uncertainty, and travel-related distress among both passengers and aviation staff. Integrating psychological preparedness into emergency response planning is therefore essential [17].

In Iraq, passenger mental health challenges are further intensified by regional instability and trauma exposure. Strengthening cabin crew psychological first aid training, implementing standardized in-flight response protocols, and developing structured crisis management systems are key priorities to enhance both passenger safety and operational stability [17].

12. Emerging Technologies in Aviation Mental Health

Emerging technologies are rapidly reshaping how mental health is assessed and managed in aviation, enabling earlier detection, continuous monitoring, and more personalized interventions. Artificial intelligence (AI) can analyze speech patterns, behavioral data, cognitive performance, and operational indicators to detect early signs of psychological distress or fatigue [13]. However, while AI may improve sensitivity, it also introduces risks of false positives that could affect careers, making it essential that such systems support—not replace—clinical and aeromedical judgment [12,13].

Wearable biometric devices further extend monitoring by tracking sleep quality, circadian rhythm disruption, heart rate variability, and fatigue patterns, allowing integration into Fatigue Risk Management Systems (FRMS) [13,20]. Such data may complement fatigue risk management but cannot, by themselves, establish a psychiatric diagnosis or determine fitness for duty. At the same time, these technologies raise significant privacy concerns, requiring strict safeguards against misuse for surveillance or disciplinary purposes [12].

Telepsychiatry offers a major advancement, particularly for resource-limited or remote regions, by enabling confidential psychiatric assessment, follow-up care, and therapy through secure digital platforms [13]. Virtual reality (VR) and simulation-based tools also enhance both treatment and assessment, particularly for conditions such as fear of flying and stress-related performance impairment [16,17].

In Iraq, these technologies present an opportunity to overcome specialist shortages and strengthen aviation mental health systems. Secure tele-aeromedical networks and structured digital programs aligned with ICAO standards could significantly improve access, continuity of care, and operational safety [1–3,13].

13. Research Gaps and future Directions: Despite growing progress, important gaps remain in aviation mental health research, regulation, and applied practice. Current epidemiological studies often rely on anonymous surveys with limited diagnostic precision, highlighting the need for longitudinal studies using structured clinical assessments and harmonized international methodologies [8,9].

Differences between regulatory authorities continue to create inconsistencies in certification standards and risk thresholds, limiting the harmonization of mental health policies in aviation [4–7]. In parallel, predictive modeling of mental incapacitation events remains underdeveloped, requiring validated algorithms that integrate clinical, cognitive, occupational, and peer-report data [13,15].

The rapid expansion of artificial intelligence (AI) and wearable technologies also introduces ethical challenges, particularly regarding consent, data protection, bias, transparency, potential misuse, and the consequences of false-positive results. Robust governance frameworks emphasizing transparency, data minimization, and independent oversight are essential to ensure ethical implementation [12,13].

For Iraq, future priorities include national studies of mental health symptoms and occupational stress among aviation personnel, evaluation of barriers to seeking care, and assessment of the feasibility of peer support programs and standardized aeromedical screening. Research should also examine the training needs of aviation medical examiners and the practical requirements for integrating psychological hazards into aviation Safety Management Systems (SMS) [11,13,14].

14. Discussion

This review highlights mental health as a central and evolving pillar of aviation safety. Aviation professionals face fatigue, circadian disruption, sustained vigilance, and high-stakes decisions, amplifying vulnerability to anxiety, depression, adjustment disorders, and substance misuse; even subclinical distress can degrade attention, judgment, situational awareness, and emotional regulation, increasing operational risk before formal diagnosis [8–10,13]. A key historical limitation has been reliance on diagnosis-based exclusion criteria, which reinforced stigma and discouraged disclosure, creating a "disclosure gap" that lets treatable conditions progress and paradoxically increases risk [10,12]. Contemporary regulatory thinking has shifted toward functional, performance-based assessment models; ICAO, FAA, and EASA increasingly prioritize functional capacity, treatment stability, and longitudinal monitoring over rigid diagnostic categorization, recognizing that safety depends on real-world ability to perform under operational stress [1–7,13].

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Peer Support Programs have emerged as impactful, offering confidential, non-punitive peer engagement to identify early distress, reduce stigma, and facilitate timely referral [11,14]. Military aviation reinforces this through resilience training, continuous fitness evaluation, and embedded psychological support [13]. Despite advances, global implementation remains inconsistent, with variability in regulatory standards, unequal access to aviation psychiatry expertise, and organizational culture gaps—more pronounced in developing systems like Iraq, where limited specialist resources, absent standardized screening, and cultural stigma delay recognition and intervention [1–7,13]. Structured screening tools combining validated psychometric instruments with clinical indicators can support aeromedical examiners in identifying at-risk individuals and guiding referral without replacing clinical judgment [13,15]. Emerging technologies—AI, wearable physiological monitoring, and telepsychiatry—promise earlier detection, continuous monitoring, and improved access, particularly in resource-limited settings, but require governance addressing privacy, consent, data security, and misuse in certification decisions [12,13]. Organizationally, effective management requires embedding psychological risk within Safety Management Systems, strengthening Just Culture, and integrating fatigue management with mental health surveillance, reframing mental health as a systemic safety variable influenced by leadership, scheduling, workload, and culture [11,18–20]. Overall, aviation mental health management is transitioning from a reactive, exclusion-based model toward a proactive, function-oriented system emphasizing early detection, continuous support, and operational fitness—offering a pathway to enhance safety and workforce resilience, particularly if adapted thoughtfully to local contexts such as Iraq [1–14,18–20].

15. Conclusion and Recommendations

Mental health is an important determinant of aviation safety, as psychological distress and psychiatric conditions—particularly Adjustment Disorders and Acute Psychosis—can impair cognition, judgment, communication, and operational reliability, contributing to catastrophic outcomes. Despite this risk, a persistent "disclosure gap" driven by stigma and fear of certification loss delays help-seeking and early intervention [8–13]. In response, aviation medicine is moving from rigid "fit/unfit" diagnostic exclusion models toward nuanced, function-based, risk-informed frameworks prioritizing operational capacity, treatment stability, and longitudinal monitoring; Peer Support Programs, early intervention systems, and continuous psychological monitoring are becoming integral, especially critical for emerging aviation systems such as Iraq given structural and resource limitations [1–7,11,13,14]. Reform requires coordinated regulatory, organizational, clinical, and technological action. Regulatory: adopt functional assessment models, establish standardized psychiatric evaluation protocols for Aviation Medical Examiners, introduce flexible certification pathways such as Special Issuance and return-to-duty programs, expand confidential Peer Support Programs, and strengthen substance misuse monitoring and rehabilitation frameworks [4–7,11,14]. Organizational: fully integrate mental health into Safety Management Systems and Fatigue Risk Management Systems, recognizing the interaction between fatigue, stress, burnout, and cognitive performance, and develop trauma-informed support structures and a Just Culture through leadership training to encourage voluntary reporting and reduce fear of punitive consequences [11,18–20]. Research and technology: conduct national epidemiological studies in Iraq to define prevalence patterns and risk factors, develop predictive modeling integrating clinical, operational, and fatigue-related variables, and adopt emerging technologies (AI, wearable monitoring, telepsychiatry) with strong ethical and regulatory safeguards [12,13]. A structured modernization roadmap aligned with ICAO SARPs is recommended, including national policy frameworks, multidisciplinary certification review panels for complex cases, and a phased strategy from foundational capacity building to full system integration [1–3,13,20]. Overall, advancing aviation mental health systems requires shifting from punitive, exclusion-based practices toward supportive, prevention-oriented, function-based approaches; reducing stigma, strengthening peer support, and embedding psychological risk management within core safety systems will enhance operational safety and workforce resilience. For Iraq, aligning international best practices with local realities offers a pathway toward a safer, more sustainable, human-centered aviation system [1–3,11–14,18–20].

16.Appendix: Iraqi Aeromedical Mental Health Checklist (Civilian & Military Aviation Personnel)

Purpose and Scope

The Iraqi Aeromedical Mental Health Checklist is proposed by the author as a structured framework to support mental health assessment among civilian and military aviation personnel. It draws on the general principles of ICAO, FAA, and EASA guidance and incorporates examples of established screening instruments [1–7,13–16].

The checklist is intended to organize relevant clinical, cognitive, behavioral, and operational information, support early identification of concerns, and guide referral for further assessment. It is a proposed tool, not a validated diagnostic instrument or an officially adopted regulatory standard. It must not replace a clinical interview, specialist assessment, applicable certification rules, or the decision of an authorized aeromedical authority.

SECTION 1: Administrative Information & Aim of Visit

Field	Details
Full Name	
Civil / Military ID	
Date of Birth	/ /
Gender	Male☐ Female☐
Marital Status	
Nationality	
Service Branch	Civil Aviation☐ Air Force☐ Army Aviation☐ Other:
Rank (if military)	
Operational Role / License Type	Pilot☐ ATCO☐ Cabin Crew☐ Maintenance☐ Other:
Squadron / Unit/ Employer / Operator	
Aircraft / Platform	
Total Duty Hours / Years of Experience	
Last Aeromedical Exam	/ /
Assessment Date	/ /
Evaluator	AME / Flight Surgeon☐ Psychiatrist☐ Psychologist☐ Aviation Psychologist☐
Referral Type	Routine Assessment☐ Post-Incident Assessment☐ Commander / Supervisor Referral☐ Self-Referral☐ Return-to-Duty Evaluation☐
Aim of Visit	Initial Certification / Flight Clearance☐ Renewal / Periodic Evaluation☐ Post-Incident Review☐ Complaint / Concern☐ Self-Referral☐ Return-to-Duty Assessment☐ Other:

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SECTION 2: Medical & Psychiatric History

A. Psychiatric History

Item	Yes	No	Notes
Previous psychiatric diagnosis			
Depression history			
Anxiety / panic			
PTSD / trauma / combat exposure			
Bipolar / manic symptoms			
Psychosis history			
Personality traits affecting duty			
Psychiatric hospitalization			
Psychotherapy / counseling			
Current psychiatric medications			
Past psychiatric medications			
Self-harm history			
Suicide attempt history			
Family mental illness			

B. Medical & Neurological History

Item	Yes	No	Notes
Head injury / concussion			
Seizure / stroke / neurological disease			
Thyroid / diabetes			
Chronic pain			
Sleep apnea			
Current medications			

C. Substance Use

Item	Yes	No	Notes
Alcohol use			
Alcohol misuse / binge			
Tobacco / nicotine			
Cannabis / stimulants / other			
Treatment for addiction			
Random drug testing required			
Breath alcohol testing			

D. Aviation / Military Aviation Stressors

Stressor	Yes	No	Notes
Fatigue impacting duty			
Shift / circadian disruption			
High workload / mission pressure			
Crew / management conflict			
Exposure to trauma / incident			
Fear of losing license / grounding			
Combat deployment exposure (military)			
Family separation / personal stress			

SECTION 3: Functional Aviation Capacity

Domain	Normal	Mild	Moderate	Severe	Notes
Attention / Concentration					
Memory / Recall					
Executive Function					
Decision-Making					
Situational Awareness					
Stress Tolerance					
Emotional Regulation					
Crew Coordination / CRM					
Fatigue Resilience					
Impulse Control					
Insight / Reliability					

SECTION 4: Peer / Command Observation 4.1 Observed Behavioral Changes

Indicator	Observed	Not Observed	Notes
Social withdrawal			
Irritability / anger			
Mood instability			
Fatigue / low energy			
Reduced concentration / errors			
Operational errors / near misses			
Poor teamwork / CRM conflicts			
Sleep disturbance			
Suspicion of substance use			
Stress-related physical complaints			

Actions Taken:
Confidential support offered☐ AME / Supervisor notified☐ Referral to mental health☐ Crisis services contacted☐ Follow-up planned☐
Notes: _____

4.2 Organizational / Operational Indicators

Item	Yes	No	Notes
Unexplained absenteeism			
Increase in operational errors			
Fatigue indicators / ESS ≥10			
Alcohol misuse suspicion			
Drug misuse suspicion			
Disciplinary conflicts			

SECTION 5: Standardized Psychometric & Cognitive Screening

5.1 PHQ-9 – Depression

Item	0	1	2	3	Notes
Little interest / pleasure					
Feeling down / depressed					
Trouble sleeping / oversleeping					
Fatigue / low energy					
Appetite changes					
Feeling failure / guilt					
Poor concentration					
Psychomotor agitation / retardation					
Thoughts of death / self-harm					

Total Score: __ /27
Interpretation:
0–4 Minimal → Fit | 5–9 Mild → Monitor / fatigue review | 10–14 Moderate → Psychiatric evaluation;15–19 Moderately severe → Temporary restriction likely | 20–27 Severe → Temporarily unfit; Item 9 positive → Immediate suicide risk

5.2 GAD-7 – Anxiety

Item	0	1	2	3	Notes
Nervous / anxious					
Unable to stop worrying					
Worrying too much					
Trouble relaxing					
Restlessness					
Irritability					
Fear something awful					

Total Score: __ /21
Interpretation: 0–4 Minimal | 5–9 Mild | 10–14 Moderate | 15–21 Severe

5.3 AUDIT-C – Alcohol Use Alcohol use within 12 hours before aviation duty?No☐ Yes☐

Question	0	1	2	3	4	Note
Frequency of alcohol Use	Never	Monthly ≤	2–/mon	2–3/wk	4+/wk	
Units of drinks per day	1–2	3–4	5–6	7–9	10+	
≥6 Units of drinks/occasion	Never	<Monthly	Monthly	Weekly	Daily	

Total Score: __ /12
Men ≥4 / Women ≥3 → Hazardous ; ≥8 → High dependence → Referral/unfit
Actions: Education☐ Monitoring☐ Random testing☐ Referral☐ Temporary Restriction☐

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5.4 Epworth Sleepiness Scale (ESS)

Situation	0	1	2	3	Notes
Reading while seated					
Watching TV					
Sitting inactive in public					
Riding as a passenger in a car					
Lying down afternoon					
Sitting and Talking with another person					
Sitting after lunch quite (without alcohol)					
Waiting in a Car stopped in a Traffic					

Total Score: __ /24;0–9 Normal | 10–15 Excessive Sleepiness| ≥16 Hazard

5.5 PCL-5 – PTSD (if trauma)

Symptom	0	1	2	3	4	Notes
Intrusive memories						
Disturbing dreams						
Flashbacks						
Distress at reminders						
Physical reaction						
Avoid thoughts / reminders						

Total Score: __ /80 → ≥33 probable PTSD → Temporary restriction

5.6 Cognitive Screening (MoCA / MMSE / BCOS)

5.6.1 MoCA – Montreal Cognitive Assessment

Domain	Normal Score	Abnormal Score	Operational Notes
Visuospatial / Executive	4–5	≤3	Instrument scanning, navigation, planning
Naming (3 animals)	3	≤2	Object recognition under stress
Attention	5–6	≤4	ATC workload, multitasking
Language	3	≤2	Radio communication
Abstraction	2	≤1	Decision-making
Delayed Recall	4–5	≤3	Procedural memory
Orientation	6	≤5	Time/place critical

Total: 30 → ≥26 Fit | 18–25 Restricted | <18 Temporarily Unfit

5.6.2 MMSE – Mini-Mental State Examination

Domain	Normal Score	Abnormal Score	Operational Notes
Orientation (Time)	5	≤4	Situational awareness
Orientation (Place)	5	≤4	Operational readiness
Registration (3 words)	3	≤2	Immediate memory
Attention / Calculation	5	≤4	Cockpit / ATC sequencing
Recall (3 words)	3	≤2	Checklist memory
Language – Naming (2)	2	≤1	Communication
Repetition	1	0	Instruction clarity
3-Step Command	3	≤2	SOP execution
Reading	1	0	Written compliance
Writing	1	0	Coherence
Copying figure	1	0	Spatial awareness

Total: 30 → ≥24 Fit | 18–23 Restricted | <18 Temporarily Unfit

5.6.3 BCOS – Brief Cognitive Operational Screening

Item	Normal Score	Abnormal Score	Operational Notes
Working Memory	3	≤2	Recall instructions
Divided Attention	3	≤2	Multitasking
Processing Speed	3	≤2	Rapid decision
Situational Awareness	3	≤2	Hazard detection
Decision-making	3	≤2	Safety-critical
Executive Planning	3	≤2	Checklist steps
Error Detection	3	≤2	Identify deviations
Risk Awareness / Judgment	3	≤2	Avoid impulsivity
Communication Accuracy	3	≤2	Radio reliability
Psychomotor / Coordination	3	≤2	Reaction / control

Total: 30 → 25–30 Fit | 20–24 Restricted | <20 Temporarily Unfit

5.7 Mini Suicide Risk Screening

Item	Yes	No	Notes
Thoughts of death			
Passive wish to die			
Suicidal ideation			
Suicide plan			
Access to lethal means			
Previous suicide attempt			
Recent major stressor			
Substance intoxication			
Protective factors (family, faith, support)			

Suicide Risk Interpretation

Risk Level	Criteria	Aeromedical Action
Low	No ideation or plan	Continue evaluation
Moderate	Ideation but no plan	Psychiatric evaluation required
High	Plan, intent, or previous attempt	Immediate grounding and urgent psychiatric referral

5.8 Mental State Examination (MSE)

Domain	Normal	Abnormal	Notes
Appearance and grooming			
Behaviour / psychomotor activity			
Speech (rate, tone, clarity)			
Mood			
Affect			
Thought process			
Thought content			
Perception (hallucinations)			
Cognition			
Insight			
Judgment			

Aeromedical Interpretation

Finding	Operational Interpretation
Normal MSE	Fit
Mild abnormalities	Fit with monitoring
Moderate abnormalities	Temporary restriction
Severe abnormality / psychosis / suicidality	Temporarily unfit

SECTION 6: Mental Incapacitation Risk Assessment

Risk Domain	Score 0	Score 1	Score 2	Score 3
Psychiatric History	None	Remote	Treated	Active
Depression Severity	PHQ <5	PHQ 5–9	PHQ 10–14	PHQ ≥15
Anxiety Severity	GAD <5	GAD 5–9	GAD 10–14	GAD ≥15
Sleep / Fatigue	ESS <10	ESS 10–12	ESS 13–15	ESS ≥16
Cognitive Screening	Normal	Borderline	Mild deficit	Major deficit
Substance Risk	None	Social use	Hazardous use	Dependence
Suicide risk	None	Passive Ideation	Active Ideation	Plan / intent
Operational Performance	Normal	Minor concern	Performance Errors	Major impairment

Total Score: _____ /24

Score	Risk Level	Operational Recommendation
0–4	Low	Fit
5–9	Mild	Fit with monitoring
10–14	Moderate	Temporary restriction
15–19	High	Temporarily unfit
20–24	Critical	Immediate grounding

SECTION 7: Special Issuance / Conditional Certification

Condition	Suitable for Special Issuance	Not Suitable	Notes
Mild Depression (Stable)			
Anxiety Disorder (Controlled)			
PTSD (treated and stable)			
Adjustment Disorder (Resolved)			
Stable SSRI Treatment			
Sleep Disorder (Treated and Controlled)			

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Possible Operational Restrictions

No night flying☐ No single-pilot operations☐ Restricted ATC sectors☐ No combat missions☐ Fatigue risk monitoring☐ Psychiatric follow-up☐ Random alcohol/drug testing☐

SECTION 8: Return to Duty Clearance

Requirement	Yes	No	Notes
Symptoms resolved			
No suicidal ideation			
Medication stable			
Cognitive screening normal			
Sleep/fatigue controlled			
Psychiatrist clearance			
AME / Flight Surgeon approval			
Simulator / competency check			

Follow-Up Plan: ☐ 6 weeks ☐ 3 months ☐ 6 months ☐ 12 months ☐ Random monitoring

SECTION 9: Safety Management System Reporting

Safety Indicator	Yes	No	Notes
Operational error linked to stress			
Fatigue-related event			
Crew behavioural concern			
Substance suspicion			
CRM conflict			
Recurrent sick leave			

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