OCHMO-STD-1880.1

NASA Aviation Medical Certification Standards

Office of the Chief Health and Medical Officer

July 2019

National Aeronautics and Space Administration Headquarters Houston, Texas



OCHMO-STD-1880.1

NASA AVIATION MEDICAL CERTIFICATION STANDARDS **SIGNATURE PAGE**

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1.0 INTRODUCTION

1.1 Document purpose

This document provides the standards and administrative procedures for the aviation medical certification of NASA aviation flight personnel. It ensures that aviation medical certification practices will be implemented consistently across the Agency and provides details on the criteria for NASA aviation medical certification. These standards and processes define aviation medical certification requirements for aviation flight personnel, and define an Agency aviation medical certification process, aviation medical standards, and medical evaluation requirements. This document is applicable to all civil servant and contractor flight personnel at all NASA Centers, including Component Facilities. Medical surveillance requirements imposed by hazards within the aviation environment (e.g. hazardous noise) are addressed in NPR 1800.1, NASA Occupational Health Program Procedures.

All personnel (civil service, contractor, military) seeking NASA aviation medical certification shall be governed by the standards and processes provided in this document.

1.2 Roles and Responsibilities

1.2.1 NASA Chief Health and Medical Officer shall:

- 1) Establish and maintain Aviation Medical Standards for NASA aviation medical certification of NASA flight personnel, including Qualified Non-Crewmembers (QNC).
- 2) Serve as the waiver authority for NASA aviation medical certification decisions.
- 3) Adjudicate appeals of flight disqualification or waiver denial decisions made as part of the NASA aviation medical certification process.

1.2.2 Aerospace Medicine Board (AMB) shall:

- 1) Through delegation from the Chief Health and Medical Officer, consider and grant waivers or denials for NASA aviation medical certification.
- 2) Participate in the development of standards for NASA aviation medical certification of NASA flight personnel.

1.2.3 Center Chief Medical Officers/Medical Directors shall:

- 1) Serve as the reporting authority for all aviation medical issues at their Center and designated Component Facilities for which they are responsible, and
- 2) Maintain records for all medically qualified and disqualified flight personnel at the Centers for which they are responsible as referenced in the above paragraph.

1.2.4 Center Chief of Flight Operations or designate shall:

- 1) Communicate to the Center Chief Medical Officer/Medical Director, or NASA Flight Surgeon or Aviation Medical Examiner at that Center, the names of the individuals requiring aviation medical certification for flying duty.
- 2) Ensure that individuals with invalid or expired aviation medical certification for flying duty are removed from the active flying duty roster.

- 3) Remove individuals who are medically disqualified from the active flying duty roster.
- 1.2.5 NASA Flight Surgeon or Aviation Medical Examiner shall:
 - 1) Perform a thorough medical evaluation that meets the NASA flight medical examination requirements.
 - 2) Review any and all current and past medical conditions, medications, and treatments, and determine whether they are disqualifying or potentially disqualifying IAW this document.
 - 3) Record all identified medical conditions, medications, and treatments in each individual's medical record completely, accurately, and in a timely manner.
 - 4) Report any change in an individual's flight status to the Center Chief of Flight Operations, using the NASA Aviation Medical Certification Form (Appendix B).
 - 5) Defer NASA aircrew or UAS operators with any potentially disqualifying medical condition to the NASA Aerospace Medicine Board Chair for waiver review and recommendation to CHMO IAW paragraph 3.2.3.
- 1.2.6 Any NASA Health Clinic physician may serve as the certifying authority for QNC personnel in accordance with paragraph 2.2.4. Exception: QNCs flying in High-Risk Aircraft must be certified by a NASA Flight Surgeon or Aviation Medical Examiner in accordance with paragraph 2.2.6.
 1.2.7 Individuals shall:
 - 1) Supply complete and accurate information regarding any and all current and past medical conditions, medications, and treatments to the examining clinician.
 - 2) Immediately report any changes in their medical condition to the attending NASA Flight Surgeon or Aviation Medical Examiner. Reportable medical conditions include, but are not limited to:
 - a) The initiation of any new medication (prescription or nonprescription),
 - b) Any visits to a physician's office or an Emergency Room as a patient,
 - c) Any admissions to the hospital (as a patient)
 - d) Any medical procedures requiring anesthesia or conscious sedation
 - e) Any changes in vision, hearing, or other physical senses
 - f) Any injuries or illnesses that effect, or reasonably could affect, the individual's ability to perform flying duties
 - 3) No individual may perform flight duty if the individual knows of, or has reason to suspect, any medical condition that would make him or her unable to meet established medical requirements. Also, no flight duty may be performed if a person is taking medication or receiving other treatment for a medical condition that results in the person being unable to meet the applicable requirements for the aviation medical certification.

2.0 NASA Aviation Medical Certification

- 2.1 General Considerations
- 2.1.1 There are three possible pathways for NASA personnel to obtain aviation medical certification Federal Aviation Administration (FAA), military, or NASA. This document describes the NASA aviation medical certification standards and processes.

- 2.1.2 NASA adopts the medical standards policy and guidelines of the Office of Aerospace Medicine of the FAA as the initial basis of determining an individual's medical qualification for flight duty. These official policies and guidelines are defined in Part 67 of Subchapter D of Title 14 of the Code of Federal Regulations, the official Guide for Aviation Medical Examiners, and other official FAA publications. Additionally, a NASA Flight Surgeon or Aviation Medical Examiner, if in their opinion the operational environment at their Center requires it, may impose additional aviation medical certification requirements within their Center-wide procedures with the concurrence of the Center Director, the Center Chief of Flight Operations, and the NASA Chief Health and Medical Officer.
- 2.1.3 Once either the FAA or NASA medical certification pathway is selected, that pathway will be adhered throughout the entirety of that medical certification process until such time as a medical certification decision is rendered, to include any accompanying Special Issuance or waiver processes, respectively.
- 2.1.4 Military aircrew assigned to NASA must continue to meet any Department of Defense (DoD) or service-specific medical certification standards for continued military service and aviation duties. They must also follow DoD and/or service-specific processes for certification and waiver of any potentially disqualifying conditions for either continued military service or aviation duties.
- 2.1.5 Air Traffic Controllers (ATC) maintaining certification and/or performing ATC duties in the National Airspace must maintain medical certification via the FAA pathway.
- 2.1.6 Once an individual is certified for flying duty, any significant changes of the individual's medical status (e.g., due to serious injury, illness and/or hospitalization) may result in a temporary suspension of aviation medical certification (medical grounding action or Duties Not to Include Flying) until the individual's health can be evaluated and determined to meet requirements for aviation medical certification. Flight personnel including Qualified Non-Crewmembers (QNC) who have had a medical condition or who are taking medication that has a reasonable probability of affecting personal health, flying safety, or mission completion must undergo review and obtain written approval from the NASA Flight Surgeon or Aviation Medical Examiner before he or she is allowed to participate in flight operations.
- 2.1.7 Individuals with conditions and/or treatments which the NASA Flight Surgeon or Aviation Medical Examiner deems as potential risks to personal health, aircraft safety or mission completion, should be temporarily removed from flying duties until a medical evaluation is performed and the individual is medically cleared to return to aviation duties. NASA aircrew or UAS operators with any potentially disqualifying medical condition will be deferred to the FAA for Special Issuance consideration if certified via the FAA pathway, or to the NASA Aerospace Medicine Board Chair for waiver review and recommendation to OCHMO IAW paragraph 3.2.3. The NASA Flight Surgeon or Aviation Medical Examiner making the recommendation will be prepared to explain his/her recommendations to the affected individual and the AMB.
- 2.2 Aviation Certification Requirements
- 2.2.1 <u>Pilots of Manned Aircraft</u> NASA aviation medical certification consists of fulfilling the requirements equivalent to a FAA First-Class medical certificate, renewed annually. Pilots 55 years of age and older shall renew medical certification every 6 months.
 - 1) Pilots who are active Astronauts and 40 years of age or older are exempt from the 14 CFR Part 61.23 requirement for biannual medical certifications due to their more rigorous annual exams and provision of comprehensive primary care and specialty referrals through the JSC Flight Medicine Clinic.

- 2.2.2 <u>Flight Engineers and Navigators</u> NASA aviation medical certification consists of fulfilling the requirements equivalent to a FAA Second Class medical certificate examination, renewed annually.
- 2.2.3 Other Aircrew Designated by the Center Chief of Flight Operations IAW NPR 7900.3 (e.g. Test Directors, Mission Managers, Safety Technicians, Flight Surgeons), though not responsible for control of the aircraft, do retain safety of flight responsibilities inherent with their positions. NASA aviation medical certification consists of fulfilling the examination requirements equivalent to a FAA Third-Class medical certificate, to be renewed annually.
- 2.2.4 Qualified Non-Crewmember (QNC) An individual, other than a member of the crew, aboard an aircraft whose presence is required to perform, or is associated with the performance of, a governmental function. This includes contractor personnel based upon: 1) their performance, or association with, a government function, and 2) QNC aviation medical certification is solely required, defined, and performed by NASA. For aviation medical certification, QNCs will submit a completed and signed Aviation Medical Evaluation Form (Appendix A) to the Center Health Clinic responsible for supporting the QNC's flight activities. A NASA Health Clinic physician will review this form, examine the applicant if available or indicated, and render an aeromedical certification decision using the NASA Aviation Medical Certification Form (Appendix B) for a period not to exceed 12 months. Positive responses on Appendix A may be further evaluated using FAA's AME Guide and associated Disease Protocols and CACI (Conditions AMEs Can Issue) Worksheets where applicable, at the discretion of the reviewing NASA Health Clinic physician. Following aviation medical certification, any change in medical condition must be immediately reported to the attending NASA Health Clinic physician prior to participating in flight activities. Refer to paragraph 2.2.6 for additional specific requirements for those flying in high-risk aircraft.
 - 1) The Center Chief of Flight Operations may request a higher level of aviation medical certification for certain QNC based upon individual risk assessment to include: frequency of participation in flight activities, type of aircraft flown, and nature of QNC duties performed. In such instances, aviation medical certification will consist of fulfilling the examination requirements equivalent to a FAA Third-Class medical certificate, to be renewed annually.
 - 2) Completion of the NASA QNC Training Course that can be found at either:

SATERN COURSE SMA-HQ-WBT-225 QUALIFIED NON-CREW MEMBER TRAINING OR

Aviation Medical Certification Standards | NASA https://www.nasa.gov/offices/ochmo/human_spaceflight/aviation-medical-certification-standards

Documentation of course completion must be submitted along with the Appendix A questionnaire, and NASA Health Clinic physician signature on Appendix B indicates review and confirmation of training completion. Reference Appendix C for instructions on completing and printing documentation for either of the above courses.

NOTE: Current QNC training is good to the end of the 12-month period since last completion of the course, however renewal will be with the NASA QNC course.

Previously, the BasicMed course was accepted for this requirement, but effective immediately only the NASA QNC training will be accepted. NASA employees and contractors who have

access to SATERN, must complete and record the QNC training in SATERN. For all others, training must be completed through the OCHMO Aviation Medical Standards link above.

- 3) The following statement will be appropriately annotated on the NASA Aviation Medical Evaluation Form:
 - a) "I acknowledge my responsibility to not participate in NASA flight operations prior to receiving QNC certification from a NASA Health Clinic physician, nor subsequently in the event that I experience any intervening change in my medical condition until reviewed and approved by a NASA Health Clinic physician."
- 4) The following statements will be appropriately annotated on the NASA Aviation Medical Certification Form:
 - a) In the Remarks section, "Documentation has been reviewed to confirm QNC completion of the NASA QNC Training Course."
 - b) In the event that the QNC is being certified remotely and unavailable to sign the NASA Aviation Medical Certification Form, the NASA Health Clinic physician will check the box stating: "QNC is certified remotely and unavailable for signature. Signed acknowledgement of above individual responsibilities has been confirmed on the NASA Aviation Medical Evaluation Form."
- 5) Additional restrictions and allowances for any QNC flying on a single mission for the sole purposes of mission familiarization or public affairs orientation:
 - a) Appendix B, once signed, will be valid for a maximum period of 10 calendar days.
 - b) Completion of the NASA QNC training course may be waived, so long as relevant aeromedical hazards of flight are briefed prior to flight to the individual by either the reviewing/evaluating NASA Health Clinic physician, or the Pilot in Command for the flight.
- 6) Centers may contact one of the following in the event a NASA Health Clinic physician is not locally available to complete the above review and certification process:

Chief Medical Officer / Senior Flight Surgeon

AFRC/NASA

FAX: (661) 276-2392 Phone: (661) 276-2258

Chief, Aerospace Medicine Board Deputy Chief and Medical Director, Clinical Services Branch JSC/NASA

O: 281-483-7999 C: 281 221-4276

Medical Operations Manager and Deputy Chief Medical Officer KSC/NASA

Office: 321-867-6386 Fax: 321-867-3881

2.2.5 Unmanned Aircraft System (UAS) Personnel:

- 1) Operators and observers whose duties involve the control of UAS of a size/complexity defined under 14 CFR Part 107 FAA SMALL UNMANNED AIRCRAFT RULE shall abide by the following:
 - a) Though no medical certification is required to operate small unmanned aircraft systems as defined by 14 CFR Part 107 FAA SMALL UNMANNED AIRCRAFT RULE, Part 107.17 of that rule stipulates that "No person may manipulate the flight controls of a small unmanned aircraft system or act as a remote pilot in command, visual observer, or direct participant in the operation of the small unmanned aircraft if he or she knows or has reason to know that he or she has a physical or mental condition that would interfere with the safe operation of the small unmanned aircraft system." Individuals operating under this rule who are unsure if their medical condition could interfere with the safe operation of their small UAV must consult a NASA Flight Surgeon or Aviation Medical Examiner for clarification.
- 2) NASA UAS operators conducting flight operations within an IFR environment must maintain an Instrument Rating, which requires a pilot certificate. Therefore, IAW paragraph 2.2.1, NASA Aviation Medical Certification consists of fulfilling the examination requirements equivalent to a FAA First Class medical certificate.
- 3) Aviation medical certification for all others involved in unmanned aircraft systems as specified in the list below consists of fulfilling the examination requirements equivalent to a FAA Third Class medical certificate, renewed annually.
 - a) Individuals operating line-of-sight unmanned aircraft by means of manually operated radio-controlled flight management systems (direct control by means of stick-to-surface interface); or who perform crewmember duties of a safety (or external) pilot/monitor acting as a fail-safe to an unmanned aircraft system that is normally controlled by a primary pilot-operator.
 - b) Individuals operating an unmanned aircraft by means of the remote Ground Control System and controlling the unmanned aircraft autonomously by means of manual flight controls or computer interface with an onboard flight management system through a command and control communications link.
 - c) Individuals who exercise command over a single NASA UAS or a formation of UAS.
 - d) Individuals required to maintain line-of-sight for operation or safety monitoring of UAS operations must have distant vision acuity that is correctable to 20/20.
- 2.2.6 <u>High- Risk Aircraft or Environment</u> (e.g., ejection seat aircraft, aircraft operating at cabin altitude > 10,000 MSL, sub-orbital spacecraft, and aircraft designated as high-risk by the Center Chief of Flight Operations) Pilots, Flight Engineers, Navigators, Other Aircrew, and QNC seeking NASA aviation medical certification to fly in high-risk aircraft, in addition to meeting the requirements described above, shall also undergo these additional tests initially and thereafter when seeking renewal of their aviation medical certification.

Electrocardiogram.

Pure Tone Audiometry.

Field of vision and peripheral vision test.

Blood Work, to include:

Hematocrit (and/or Hemoglobin);

- Lipid Profile: Total Cholesterol, Triglycerides (TG), High Density Lipoprotein (HDL), and Low Density Lipoprotein (LDL);
- Fasting Blood Sugar; and
- Hemoglobin A1-C
- 1) High-risk aircraft flight personnel will be examined by a NASA Flight Surgeon or Aviation Medical Examiner and the results of the additional testing assessed for any anomalies or conditions (e.g. anemia, diabetes) that could pose a risk to personal health, flight safety or mission success. Additionally, cardiovascular status will be assessed by the NASA Flight Surgeon or Aviation Medical Examiner using a standard cardiovascular risk assessment tool (e.g. Framingham, Reynolds Scoring System, NASA's AstroCHARM, ACC/AHA ASCVD Risk Calculator). If a risk equal to or greater than 10% in 10 years is obtained, an evaluation by a cardiologist is required. Any confirmed cardiovascular disease is disqualifying. A complete cardiology evaluation may be submitted, for waiver consideration, to the NASA Aerospace Medicine Board. NASA Centers may require additional cardiovascular screening based on their local requirements.
- 2) QNC participating in high-risk flight should be briefed on the specific aeromedical hazards of high-risk flight during the pre-flight aviation medical certification evaluation.
- 2.2.7 <u>Pregnancy</u> Any female aircrew or QNC must report pregnancy to the NASA Flight Surgeon or Aviation Medical Examiner. Pregnancy is disqualifying for flight duty. Waiver may be considered for flight duty on a voluntary basis only during the second trimester, from 14-26 weeks gestation, and upon examination by a NASA Flight Surgeon or Aviation Medical Examiner. Pregnancy is a disqualifying condition for high-risk aircraft flying duty at any stage of gestation.

3.0 Administrative Considerations

- 3.1 Qualifications for Providing Aviation Medical Certification
- 3.1.1 Medical examination for aircrew or UAS operator certification under the NASA Aviation Medical Certification Standards can only be accomplished by a NASA Flight Surgeon or Aviation Medical Examiner. A NASA Flight Surgeon or Aviation Medical Examiner must meet the following criteria:
 - 1) Is a physician, either D.O. or M.D.;
 - 2) Holds a current and unrestricted U.S. based medical license;
 - 3) Has completed any Center-required Flight Surgeon training; and
 - 4) Has successfully completed the FAA Aviation Medical Examiner basic course, any Department
 - of Defense flight surgeon training course, or equivalent formal aerospace medicine training course.
- 3.1.2 NASA Health Clinic physicians must meet criteria 1) and 2) above to perform QNC aviation medical certifications.
- 3.1.3 Physicians at NASA Centers with appropriate aerospace medicine credentials will be awarded privileges IAW NPR 1850.
- 3.2 Waivers
- 3.2.1 General Policy

- 1) NASA personnel who received their aviation medical certification through the FAA must comply with the following requirement if their aviation medical certification includes a Special Issuance or Statement of Demonstrated Ability:
 - a) Flight crews shall report Special Issuances (FAA Waivers) and FAA Statements of Demonstrated Ability (SODA) to the Chief of Flight Operations for review by a NASA Flight Surgeon or Aviation Medical Examiner.
- 2) Considerations for NASA-specific aeromedical waivers will be processed through the NASA Aerospace Medicine Board.
- 3) An expiration date will be placed on waivers for conditions that may progress or require periodic reevaluation outside of the scope of periodic medical examinations. This will ensure periodic review of waivers by the appropriate waiver authority. Waivers are valid for the specified condition only. Any exacerbations of the condition or other changes in the individual's medical status automatically invalidate the waiver, and a new one must be requested. In some circumstances waivers may be conditional and individuals may receive waivers valid only for specific aircraft, missions, or flight crew configurations.

3.2.2 Waiver Authority

The NASA Chief Health and Medical Officer retains waiver authority for NASA aviation medical certification standards for aircrew and UAS operators. There is no waiver process for QNC beyond the certification procedures in paragraph 2.2.4.

3.2.3 Waiver Procedures

NASA Flight Surgeons or Aviation Medical Examiners will submit encrypted aeromedical summaries of aircrew and UAS operators with disqualifying or potentially disqualifying medical conditions to the Chair, Aerospace Medicine Board (AMB) at the Johnson Space Center, and will participate in all AMB meetings for which one of their submitted cases is being presented and discussed. The AMB will review such cases and the AMB Chair will submit a recommendation to the NASA Chief Health and Medical Officer (CHMO) to either waive or deny aviation medical certification. Any flight personnel who do not meet NASA Aviation Medical Standards should be referred to the AMB Chair for waiver consideration. The AMB Chair, in consultation with the AMB, then determines if a waiver is appropriate. If deemed appropriate, the chair will forward the recommended waiver to the CHMO for consideration. The CHMO is the waiver authority. Upon notification of the waiver determination decision, notation will be made by the attending NASA Flight Surgeon or Aviation Medical Examiner in the individual's medical record and on the NASA Aviation Medical Certification Form. If a waiver is granted, the expiration date of the waiver will likewise be noted.

3.2.4 Aeromedical Summaries

- 1) Aeromedical summaries prepared by NASA Flight Surgeons or Aviation Medical Examiners for waiver submission will include the following elements:
 - a) Patient demographics to include aviation duty title and flight history/flight hours information
 - b) Relevant case history and physical examination findings
 - c) Supporting ancillary studies and specialist consultations
 - d) List of diagnoses/conditions not meeting NASA aviation medical certification standards
 - e) Recommendation whether or not to provide a waiver, taking into consideration risk to personal health, flight safety, and mission success

- 2) To be considered acceptable for flying duty, a medical condition, medication, or treatment must:
 - a) Not pose a risk of sudden incapacitation
 - b) Not interfere with the individual's ability to perform their flight duties
 - c) Not impact the safe operation of the aircraft
 - d) Not interfere with the usage or effectiveness of the personal safety equipment in the aircraft, including but not limited to oxygen supply equipment, pressure suits, and ejection seats
 - e) Pose minimal potential for subtle performance decrement particularly with regard to the higher senses, including but not limited to vision, level of alertness, or cognition
 - f) Be resolved or be stable and be expected to remain so under the stresses of the aviation environment for the duration of the waiver
 - g) Not be exacerbated by nominal flight activities, including aircraft ingress/egress
 - h) Not place the individual at significantly increased risk of injury during in-flight or ground emergency situations (This includes risk of injury during emergency egress procedures, including ejection)
 - i) Have first symptoms or signs that are easily detectable and not pose a risk to the individual or the safety of others, if the possibility of progression or recurrence exists

3.3. Recordkeeping

- 3.3.1 Documentation related to aeromedical certification is part of and will be maintained in the individual's occupational health record as part of the NASA Electronic Health Record System. This includes: all identified medical conditions; medications; treatments; waivers; and completed NASA Aviation Medical Evaluation Forms and copies of NASA Aviation Medical Certification Forms (Appendices A and B respectively).
- 3.3.2 NASA Flight Surgeon or Aviation Medical Examiners shall certify that aircrew, UAS operators and QNC meet NASA Aviation Medical Standards by completing and providing to Flight Operations the NASA Aviation Medical Certification form (Appendix B).
- 3.3.3 Sample forms for aviation medical evaluation and certification are found in Appendix A and B.
- 3.3.4 Records related to aeromedical certification will be maintained IAW NPR 1800.1 and 1441.1.
- 3.3.5. Center Health Clinics must comply with NPR 1382.1A privacy requirements and not share medical documentation with Protected Health Information such as Appendix A with Flight Operations or other non-medical personnel.

4.0 References

14 CFR §61.3, Requirement For Certificates, Ratings, and Authorizations.

14 CFR §61.53, Prohibition on Operations During Medical Deficiency.

14 CFR Part 67, Medical Standards and Certification.

NPD 1000.3, The NASA Organization

NPD 1382.17J, NASA Privacy Policy

NPR 1382.1A, NASA Privacy Policy Requirements

NPR 1441.1 NASA Records Retention Schedules

NPR 1800.1, Occupational Health Program Procedures

NPR 7900.3(series), NASA Aircraft Operations Management

NASA Aerospace Medicine Board Charter

NASA AVIATION MEDICAL EVALUATION FORM

LAST NAME FIRST NAME MIDDLE NAME												
STREET ADDRESS CITY					STATE			STATE	ZIP			
DAY PHONE # PHONE					NE#				E-MAIL ADDRESS			
DOB (N	IM/DD/Y	Y)	WEIGHT (LBS	WEIGHT (LBS)				HEIGHT (INCHES)				
PHYS	ICAL L	IMITATIONS: Have yo d in your life.	u EVER HAD, or do you	NOW HAVE, a	ny of th	e follow	ving pl	nysical limitations	? Answer "YES" for every limitation you			
YES	NO	LIMITATION	YES	NO	LIMITATION							
		Do you use a cane or walker?					Doy	Do you need to use the bathroom more than every 2 hours?				
		Do you require any sp	cs?			Do you have urinary or fecal incontinence?						
		Do you need assistan				Is yo	s your best vision (corrected or uncorrected) worse than 20/40?					
		Do you have difficulty	s?			Doy	Do you require hearing aids?					
		Do you have difficulty walking for 30 minutes without resting?					Doy	o you have problems at high altitude?				
		Would you have difficulty jumping safely from a 5 foot height?					Are you incapable of wearing a tightly fitting respirator mask?					
EXPLANATIONS: Explain any "YES" answer from above. Please describe the condition and/or the approximate date of occurrence. Use additional page if necessary.												
MEDICAL CONDITIONS: Have you EVER HAD, or do you NOW HAVE, any of the following conditions? Answer "YES" for every condition you have ever had in your life.												
YES	NO	CONDITION		YES	NO	CON	CONDITION					
		Do you use inhalers a	en?			Doy	ou have ear/sinu	s trouble while flying?				
		Do you use a CPAP of				Doy	ou have open wo	wounds/sores requiring a dressing?				
		Do you have a persis	Do you have a persistent cough?				Doy	ou have a colost	stomy or indwelling catheter?			
		Do you have any heart or lung problems?					Hav	e you had any su	•			
		Do you have a pacemaker or internal defibrillator?					Are	you having surge	gery within 6 weeks of your flight?			
		Have you had a blood clot (DVT or pulmonary embolism)?					Hav	e you been hospi	spitalized?			
		Have you had a stroke (CVA) or TIA?					Hav	e you had any do	doctor visits in the past 6 months?			
		Have you had seizures or fainting spells?					Are	you pregnant?				
Do you have diabetes?												
EXPLANATION OF MEDICAL CONDITIONS: Explain any "YES" answer from above. Please describe the condition and/or the approximate date of occurrence. Use additional page if necessary.												
DO YOU CURRENTLY USE ANY MEDICATION (Prescription or non-prescription)? YES NO If yes, list name, purpose, dosage & frequency of use. (Attach additional sheet if needed).												
DO YOU HAVE ANY ALLERGIES? YES NO If yes, list the substance and/or /drug and describe allergic symptoms.												
MEDICAL RECOMMENDATIONS: Have you ever received any of the following medical recommendations, treatments, or dispositions? Answer "YES" for every condition you have/ever had in your life.												
YES	NO	Have you been medic	RECOMMENDATION Have you been medically rejected for military service?			NO		OMMENDATION a volume coived tre	ATION ceived treatment for drug/alcohol dependence?			
		•				-		,	cally advised not to fly?			
		•	cally denied insurance co			-		-	•			
Do you now, or have you, received medical disability? Have you been medically advised not to scuba dive?												
EXPLANATIONS: If you answered "yes" to any of the above items, describe the condition and the approximate date of occurrence. Use additional page if necessary.												
I acknowledge my responsibility to not participate in NASA flight operations prior to receiving QNC certification from a NASA Health Clinic physician, nor subsequently in the event that I experience any intervening change in my medical condition until reviewed and approved by a NASA Health Clinic physician.												
SIGNATURE OF APPLICANT												
									· · · · · · · · · · · · · · · · · · ·			

Appendix A: NASA Aviation Medical Evaluation Form; May 2019

APPENDIX B

NASA Aviation Medical Certification Form

(This Form is Subject to the Privacy Act of 1974.)

NAME	(Last, Fi	rst, Middle Initial)		EMPLOYER/SPONSOR								
THE ABOVE INDIVIDUAL HAS BEEN FOUND: (Check all appropriate boxes.)												
	MEDICALLY RESTRICTED FROM FLYING DUTY (DNIF) ESTIMATED DATE OF RETURN TO FLYING DUTY:											
	MEDICALLY CLEARED TO RETURN TO FLYING DUTY AFTER AN ILLNESS OR INJURY											
	MEDICALLY CLEARED FOR FLYING DUTY											
		PILOT-IN-COMMAND (First Class)										
	FLIGHT ENGINEER OR OTHER PRIMARY AIR-CREW (Second Class)											
	AIR TRAFFIC CONTROLLER (Second Class)											
	UNMANNED AIRCRAFT SYSTEM (UAS) RC PILOT or OBSERVER (Third Class)											
		UNMANNED AIRCRAFT SYSTEM (UAS) RANGE SAFETY OFFICER (Third Class with 20/20 vision)										
	QUALIFIED NON-CREW MEMBER											
		OTHER FLIGHT DUTIES (Explain in Remarks)										
	MEDICALLY CLEARED FOR DUTIES ONBOARD A HIGH PERFORMANCE AIRCRAFT											
	REQUIRED TO WEAR VISION CORRECTION DEVICES WHILE PERFORMING FLYING DUTIES											
REMARKS												
Documentation has been reviewed to confirm QNC completion of a FAA-approved BasicMed aeromedical knowledge course.												
Yes □ No □ N/A												
DATE	MEDICA	L CLEARANCE EXPIRES										
TYPED)/PRINTI	RE OF NASA FLIGHT SURGEON or AME	DATE									
I acknowledge: it is my responsibility to report any change in my health condition to the NASA Health Clinic												
physician; that I will not participate in flying duty unless medically cleared; and that I have been notified and understand the above actions and recommendations.												
SIGNATURE OF ABOVE INDIVIDUAL												
□ QNC is certified remotely and unavailable for signature. Signed acknowledgement of above individual responsibilities has been confirmed on the NASA Aviation Medical Evaluation Form.												

Appendix B: NASA Aviation Medical Certification Form; May 2019

APPENDIX C

Instructions for Completing and Printing Documentation of NASA Qualified Non-crewmember Training Course

FOR ALL NASA EMPLOYEES AND CONTRACTORS WHO HAVE ACCESS TO SATERN SATERN Qualified Non-Crew Member Training Course – https://satern.nasa.gov/

- 1. Launch SATERN.
- 2. Under Find Learning, Search for SMA-HQ-WBT-225.
- 3. Select QUALIFIED NON-CREW MEMBER TRAINING.
- 4. Take Course.
- 5. Pass Knowledge Checks.
- 6. Print Certificate.
- 7. Provide to the sponsor of the flight/mission, flight operations administrator, or health unit as previously instructed.

FOR ALL OTHERS WHO ARE UNABLE TO ACCESS SATERN

NASA Qualified Non-Crew Member Training Course -

https://www.nasa.gov/offices/ochmo/human_spaceflight/aviation-medical-certification-standards

- 1. Click Take the Qualified Non-Crew Member Medical Training
- 2. Take Course
- 3. Take/Pass Knowledge Checks
- 4. Print Certificate Form page
- 5. Provide to the sponsor of the flight/mission, flight operations administrator, or health unit as previously instructed.