



Subject: Flight Crew Duty Day Limitations

Responsible Office: Office of Safety and Mission Assurance

1. Introduction

a. This interim directive issues immediate changes to NASA Procedural Requirement (NPR) 7900.3D, NASA Aircraft Operations Management Manual, resulting from Mishap Investigation Board (MIB) Recommendations for Exceeded Crew Duty Day Limitations, Agency-Level High Visibility Close Call, 10/28/2023, NMIS # 23-101348.

b. The MIB report noted NPR 7900.3D does not contain crew duty day requirements for all flight operations; only passenger transportation operations have specified crew duty day. NPR 7900.3 also references, but does not define or specify requirements, for “augmented crew”.

c. Questions regarding this NASA Interim Directive (NID) should be forwarded to Mr. Grant Watson at grant.m.watson@nasa.gov.

2. Applicability

This NID is applicable to NASA Headquarters and NASA Centers, including Component Facilities, Technical and Service Support Centers, and Commercial Aviation Services (CAS).

3. Crew Duty and Rest Requirements

As specified below, passenger transportation crew duty day and rest requirements listed in Chapter 4 of NPR 7900.3D now apply to all NASA flight operations. Also, there are new requirements in relations to augmented crew. These requirements address the gap in non-passenger flight operations identified by the MIB and ensures consistent crew duty day and rest requirements for all NASA flight operations across the Agency.

a. Crew Duty Day

(1) The basic crew duty day shall not be scheduled to exceed 14 consecutive hours.

(2) The Center’s Chief of Flight Operations may, for a particular flight, extend the basic crew duty day to 16 hours with an assessment of the risks and implementation of appropriate mitigations.

(3) The augmented crew duty day shall not be scheduled to exceed 18 consecutive hours .

(4) Augmented Crew

(a) Augmented flight crew shall be fully qualified and current in accordance with NPR 7900.3D, Section 3.8.

(b) For flights with augmented crew, the Center shall develop a fatigue management plan that appropriately limits flight deck duty time and provides for a rest/sleeping area. The appropriateness of the plan is to be assessed as part of the Operational Readiness Review and the plan is to be approved by the Chief of Flight Operations.

(5) When circumstances beyond the control of the flight crewmember (e.g., adverse weather conditions) cause an unexpected delay in landing, the Pilot-in-Command (PIC) may exercise reasonable judgment concerning the continuation of the flight. If it is deemed to be safer to continue to the intended destination within a short period of time, rather than to divert to another location based on weather, landing conditions at the alternate, or other factors, then the PIC may continue the mission/flight. The PIC shall provide a debrief of the situation to the Chief of Flight Operations upon landing.

b. Crew Rest

(1) Crew rest shall include free time for meals, transportation, and rest and must include an opportunity for 8 hours of uninterrupted sleep time for every 24-hour period.

(2) At en route stops, crew rest shall not commence until 1 hour after termination of the mission in order to allow for necessary post-flight duties.

(3) The crew rest period shall end 1 hour prior to the crew beginning official duties in preparation for departure, normally at least 1 hour prior to scheduled takeoff time.

(4) The Center's Chief of Flight Operations (CFO) may approve a reduced crew rest of no less than 8 hours total ground time, provided this time is confined to between the hours of 8 p.m. and 8 a.m. local time.

(5) Approvals for reduced crew rest shall be limited to one occurrence per crewmember during any 7-day period.

(6) When a flight crewmember has exceeded the crew duty day limitations in section 3.a, because of an emergency response or circumstances beyond the control of the agency or flight crewmember (e.g., adverse weather conditions), that flight crew member shall have a rest period as determined by the CFO, but not less than 12 hours.

4. Requirements to address other MIB recommendations

a. All Center Aircraft Flight Operations Manuals shall be no less restrictive, but may be more restrictive, than NPR 7900.3.

b. All operational NASA aircraft missions shall be assigned aircrew that meet the qualifications, proficiency, and currency requirements of NPR 7900.3D, Section 3.8.

c. If the Chief of Flight Operations is participating in a flight associated with any waiver of a requirement, the waiver shall be elevated to the Center Director for approval.