



DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
2000 NAVY PENTAGON  
WASHINGTON, DC 20350-2000

IN REPLY REFER TO

OPNAVINST 3710.37  
N889J3  
01 November 1999

OPNAV INSTRUCTION 3710.37

From: Chief of Naval Operations (N88)  
To: All Ships and Stations

Subj: ANTHROPOMETRIC ACCOMMODATION IN NAVAL AIRCRAFT

Ref: (a) JSSG-1776-B

1. Purpose. To set forth policy and to delegate responsibilities for the implementation of a program to optimize anthropometric compatibility when assigning Aeronautically Designated Personnel to the variety of aircraft cockpit sizes and crew stations which exist to enhance safety in Naval Aviation.

2. Background

a. OPNAVINST 3710.36A, canceled in 1986, previously provided guidance to Commander Navy Personnel Command (COMNAVPERSCOM), Commander Naval Air Systems Command (COMNAVAIRSYSCOM), Chief of Naval Air Training (CNATRA), and Chief, Bureau of Medicine and Surgery for their role in assigning Aeronautically Designated Personnel and CNATRA students to any given aircraft. With development of new aircraft and the requirement to accommodate a larger percentage of the population, a new program is needed to meet the requirements of the aviation force.

b. It is essential to accurately match potential aircrew candidates to appropriate aircraft. Emerging technology has made it more viable and much easier to take accurate, consistent anthropometric measurements of both personnel and cockpit geometry. New policy, detailed in this instruction, will ensure consistent anthropometric consideration is applied to the full spectrum of aircraft and aircrew personnel. Proper execution of this anthropometric program will greatly enhance candidate aircrew selection and pipeline assignment, aircrew safety, equipment safety, readiness and affordability.

3. Discussion. Anthropometry is the science of measuring the human body, its parts, and functional capacities. Anthropometric measuring procedures and anthropometric restriction (AR) coding system software for both personnel and aircraft have been developed. The entire inventory of Navy and Marine Corps aircraft is updated as technology advances. These procedures will maximize safety and promote human performance of aviation students and designated personnel by assignment to compatible aircraft/crew stations.

4. Policy. The following policies are set forth for anthropometric accommodation in naval aircraft:

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a. It is incumbent upon all naval aviator and NFO recruitment/selection sources to ensure that anthropometric measurements of prospective aviators/NFOs are taken as early in the selection process as possible. Early screening of personnel not suited for aviation training because of anthropometric incompatibilities will greatly reduce costs to the Navy in four primary areas:

(1) The cost of flight physicals and any required follow-on testing or examinations for prospective aviation candidates who are then determined not to be physically qualified (NPQ) for anthropometric incompatibilities;

(2) The cost of travel for flight physicals for prospective aviation candidates who are then rated NPQ for anthropometric incompatibilities;

(3) The cost of training aviation candidates for pipelines for which they are anthropometrically incompatible and subsequent re-training to another pipeline or another field; and,

(4) The cost associated with a mishap/injury when anthropometry is considered a causal factor.

b. Because the safety consequences of assigning an anthropometrically incompatible crewmember to an aircraft can be catastrophic, waivers shall not be considered for anthropometric incompatibilities for flight training applicants.

c. All new acquisition aircraft developed and procured for Navy and Marine Corps use will accommodate the anthropometric range of the aviator population specified by reference (a) or the aircraft Type/Detail specification. Accommodation of less than the full range will be justified through trade-off studies and cost/benefit analyses.

5. Scope. This program is applicable to all Navy and Marine Corps Aeronautically Designated Personnel, aviation students, and any other personnel in a flight status.

## 6. Responsibilities

a. Chief of Naval Operations (CNO) (N889) will serve as the program policy coordinator.

b. Commandant of the Marine Corps (CMC) will support the implementation of this program within the Marine Corps to ensure anthropometric compatibility of Marine Corps Aeronautically Designated Personnel upon initial assignment after completion of instruction at the Naval Air Training Command and when considering individuals for transition/conversion training thereafter.

c. COMNAVAIRSYSCOM shall:

(1) Manage the overall Aircrew Anthropometric Engineering Program. This includes determining the scope of naval aircraft requiring anthropometric measurements, the resources required to measure aircraft crew stations, analyzing and developing anthropometric measuring procedures, identifying anthropometric restriction (AR) codes (including weight), and developing and managing an anthropometric measure certification program.

(2) Keep the AR codes current by updating dimensional data as modifications to existing aircraft and/or aircrew clothing and equipment occur, or as new aircraft are introduced.

(3) Ensure that future aircraft designs are compatible with predicted aircrew anthropometry and accommodate the anthropometric range of the aviator population specified by reference (a).

d. CNATRA, under the command of Chief of Naval Education and Training (CNET), shall:

(1) Ensure anthropometrically compatible pipeline assignments of students to current inventory of training and pipeline aircraft.

(2) Ensure anthropometric coding is entered as part of the student's training jacket.

(3) Notify COMNAVPERSCOM or CMC of student anthropometric aspects that may limit their assignability.

e. CMC/COMNAVPERSCOM (PERS-43) shall:

(1) Ensure aviation candidates meet aviation anthropometric entrance standards before assignment to initial aviation training. Anthropometric waivers shall not be granted.

(2) Ensure in service aviators meet anthropometric standards in compliance with the platform to which they are assigned. Those not in compliance shall submit a waiver request via their chain of command to CNO via BUMED and COMNAVPERSCOM.

(3) Coordinate with CNATRA to ensure initial compatible assignments of Aeronautically Designated Personnel.

(4) Ensure Aeronautically Designated Personnel receive assignments to anthropometrically compatible aircraft.

(5) Maintain personnel anthropometric coding data as a permanent part of officer/enlisted service record.

f. Chief, Bureau of Medicine and Surgery (MED-23/Aviation Medicine Division) shall:

(1) Serve as an advisor to CNO on anthropometric and physical qualification issues.

(2) Train/indoctrinate Aeromedical Safety Officers (AMSOs)/Physiologists in the processes and procedures for anthropometric evaluations.

(3) Ensure that required anthropometric measurements are accurately taken and recorded on all candidates for aeronautical designation.

(4) Ensure that required anthropometric measurements are accurately taken on all aviators/aircrew in conjunction with their physicals at five year intervals from the age of 25 until the aviator/aircrew is no longer in a flight status.

(5) Ensure that anthropometric measuring equipment is available, properly maintained, and utilized.

(6) Issue necessary implementing instructions and forms to ensure that anthropometric data are accurately obtained and recorded.

7. Liaison. Direct liaison between concerned commands is authorized for the purpose of implementing this instruction.

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