United States Government Accountability Office

Report to Congressional Addressees

June 2017

OPERATIONAL SUPPORT AIRLIFT

Fleet Sufficiency is Assessed Annually

GAO-17-582

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GAO Highlights

Highlights of GAO-17-582, a report to congressional addressees

Why GAO Did This Study

OSA missions support the movement of a limited number of high-priority passengers and cargo with time, place, or mission-sensitive requirements. DOD's OSA aircraft are variants of commercial aircraft. OSA aircraft are categorized as either executive (used to transport DOD, congressional, and cabinet officials) or non-executive (used to fulfill wartime or contingency needs). As of May 2017, DOD had 287 OSA aircraft—44 executive and 243 non-executive—about 6 percent of DOD's airlift/cargo/utility aircraft.

House Report 114-537 and Senate Report 114-255 included provisions for GAO to review the use and size of the OSA fleet. This report examines the extent to which DOD (1) used OSA executive aircraft in 2014 and 2015, and if this usage complied with guidance; and (2) has a process to validate its OSA fleet size. GAO reviewed DOD guidance for approving the use of OSA aircraft, analyzed the most current executive aircraft flight data available—calendar years 2014 and 2015—and compared the approval documentation from a sample of those flights to DOD's guidance. GAO also reviewed documentation and interviewed officials to assess DOD's OSA validation process and results.

What GAO Recommends

GAO is not making any recommendations in this report. DOD provided technical comments on a draft of this report, which GAO incorporated as appropriate.

View GAO-17-582. For more information, contact Zina D. Merritt at (202) 512-5257 or merrittz@gao.gov.

What GAO Found

In calendar years 2014 and 2015, government officials took thousands of flights on Operational Support Airlift (OSA) executive aircraft, and our review of a nongeneralizable sample of 53 flight packages found that those trips generally followed Department of Defense (DOD) guidance for requesting the use of government aircraft. DOD requires its officials in certain positions to fly on military aircraft, including OSA executive aircraft. It also authorizes, but does not require, officials in other government positions to fly on OSA executive aircraft. We analyzed the use of OSA executive aircraft during 2014 and 2015—the latest years for which data were available—and found that of the 19,752 executive flights conducted, 31 percent supported required users and 69 percent supported other authorized users. The Vice President, the First Lady, and other cabinet-level officials on White House support mission trips accounted for about 12 percent of the flights, and members of congress and congressional employees accounted for about 5 percent of the flights. DOD guidance requires documentation for each flight request including the rank or position of the traveler, itinerary, and in some cases, cost data. While not generalizable beyond these flights, our review of 53 flight request packages found that the packages generally contained most required documentation. Although some packages were missing items, we discussed those items with DOD officials, and we did not find evidence to suggest the requested flight should have been disapproved.

Figure: C-20 Operational Support Airlift

Source: Defense Video Imagery Distribution System. | GAO-17-582

In recent years, DOD has implemented a consistent process to validate the size of its OSA fleet and to have a risk assessment of the fleet's ability to meet requirements all 365 days per year. In 2016, for example, the executive fleet's risk-to-mission accomplishment was assessed as moderate, and the non-executive fleet's risk-to-mission was assessed as low. The services do not generally use the validation process determinations as a basis for OSA aircraft procurement and divestment decisions. According to service officials, those decisions are based on separate, independent evaluations of their force structure needs, which evaluate the age and maintenance conditions of their aircraft, and the need to balance OSA aircraft requirements against other service priorities.

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Abbreviations

CCDRs	Combatant Commanders
DOD	Department of Defense
OSA	Operational Support Airlift
GAO	U.S. Government Accountability Office

U.S. GOVERNMENT ACCOUNTABILITY OFFICE
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Congressional Addressees:

The Department of Defense (DOD) describes Operational Support Airlift (OSA) missions as a special category of airlift missions that involve the movement of a limited number of high-priority passengers and cargo with time, place, or mission-sensitive requirements.[1] OSA missions can be performed by a wide variety of aircraft, but DOD generally describes its OSA aircraft fleet in terms of two groups, its executive aircraft and its nonexecutive aircraft. Executive aircraft provide air transportation for federal and DOD-approved senior leaders, and are configured to support travel when other aircraft do not provide the timeliness, security, communications capability, or workspace required. Executive aircraft missions include transporting the Vice President, senior DOD officials such as the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, cabinet, other high-ranking executive branch officials, and members of Congress.[2] Nonexecutive aircraft are used to fulfill wartime requirements, contingency operations, domestic support missions, and day-to-day activities. As of May 2017, DOD had 287 OSA aircraft—44 executive and 243 nonexecutive aircraft, which is a small portion of DOD's overall aircraft inventory. In fiscal year 2017, DOD operated 4,517 total aircraft in the airlift/cargo/utility category, which includes OSA aircraft according to DOD's Annual Aviation Inventory and Funding Plan. In fiscal year 2016, DOD had allocated more than $890 million to operate and maintain its OSA aircraft, according to budget documents.

House Report 114-537 and Senate Report 114-255 accompanying proposed bills for the National Defense Authorization Act for Fiscal Year 2017 included provisions for us to review aspects of DOD's management of OSA aircraft, including the utilization of the aircraft and the validation of its fleet size.[3] This report examines the extent to which: (1) DOD used

[1] DOD Instruction 4500.43, *Operational Support Airlift (OSA)* (May 18, 2011)(incorporating change 1, June 26, 2013).

[2] OSA does not include travel by the President, who travels on the VC-25A (Boeing 747) aircraft designated as Air Force One when the President is onboard.

[3] H.R. Rep. No. 114-537, at 212 (2016); S. Rep. No. 114-255, at 288 (2016). In addition, the Chairman of the Senate Foreign Relations Committee is a co-requester for our review in response to the Senate report provision.

OSA executive aircraft in 2014 and 2015 and the usage for select flights complied with guidance; and (2) DOD has a process to validate its OSA fleet size. Additionally, we provide information on OSA aircraft mishaps in appendix I, and maintenance-related information in appendix II.

For objective one, we identified and reviewed DOD's and its components' guidance related to the use of executive aircraft.[4] We obtained the most current data available—calendar year 2014 and 2015 executive aircraft flight data—from both the Joint Staff and the military services. We then analyzed the data to identify the portions of the total flights that supported various categories of DOD and non-DOD travelers. We also analyzed the calendar year 2014 and 2015 flight data by type of aircraft used. We also selected a nongeneralizable, random sample of 53 executive OSA flights and compared the documentation in the flight request packages to the flight package documentation requirements listed in DOD's OSA guidance.[5] We concluded that the data provided by the Joint Staff and the military services were sufficiently reliable for the purposes of our reporting objectives by interviewing each group respectively about their databases used to enter and maintain flight data. Additionally, we interviewed officials from the Joint Staff, U.S. Transportation Command, the military services, the Office of the Secretary of Defense Executive Secretary, and the Office of the Assistant Secretary of Defense for Legislative Affairs and discussed their roles in approving the use of executive aircraft.

For objective two, we gathered documentation on DOD's annual OSA validation process. The documentation we reviewed included DOD guidance, meeting minutes, briefings, and a methodology paper. We also analyzed the results of the OSA fleet validation process. We reviewed and analyzed the OSA fleet validation memorandums—issued annually

[4] Key guidance includes: DOD Directive 4500.56, *DOD Policy on the Use of Government Aircraft* (Apr. 14, 2009)(incorporating change 3, June 24, 2014); DOD Instruction 4500.43, *Operational Support Airlift (OSA)* (May 18, 2011)(incorporating change 1, June 26, 2013); and DOD Directive 4515.12, *DOD Support for Travel of Members and Employees of Congress*, (Jan. 15, 2010).Since the use of executive aircraft is not tied to traditional training or operational needs, we focused our first objective on how these aircraft were used and the extent to which this usage complied with the guidance DOD established for their use.

[5] The randomly identified 53 flight request packages are not generalizable to the 19,752 executive flights conducted during calendar years 2014 and 2015, but instead represent only the 53 flight packages examined. Additionally, the sample does not cover any congressional user or Combatant Command flights, as those flight packages were unavailable for review, and therefore not part of the scope of this sample. Please see Appendix III for details.

since 2014—from the Chairman of the Joint Chiefs of Staff to the Secretary of Defense. We also interviewed officials from the military services, Joint Staff, the U.S. Transportation Command, and a private contractor who supported the OSA validation process, to determine their roles in the annual validation process and to identify how the process results are used. We also discussed the basis for OSA force structure decisions with officials from the military services. Appendix III provides a more detailed description of our scope and methodology.

We conducted this performance audit from June 2016 to June 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Overview of OSA Aircraft

According to DOD, there were 287 aircraft in the OSA fleet as of May 2017. All OSA aircraft are military variants of commercial aircraft. (See appendix IV for more information and images of these aircraft.) Table 1 lists the number of OSA aircraft by DOD owner/operator and type of usage.

Table 1: Department of Defense Operational Support Airlift (as of May 2017)

	Air Force	Army	Marine Corps	Navy	U.S. Special Operations Command	Total
Executive Aircraft	32	7	0	5	0	**44**
Nonexecutive Aircraft	42	121	25	33	21	**243**[a]
Total	**74**	**128**	**25**	**38**	**21**	**287**

Source: GAO analysis of Department of Defense documents. I GAO-17-582

[a]Includes one contract aircraft for U.S. Africa Command

A majority of the executive aircraft is located at Joint Base Andrews, Maryland, and a small number are located overseas, as shown in table 2.

Table 2: Department of Defense Executive Aircraft Home Bases (as of May 2017)

Location	Air Force	Army	Navy	Total
Joint Base Andrews, Maryland	18	6	3	**27**
Ramstein Air Base, Germany	5	0	0	**5**
Scott Air Force Base, Illinois	4	0	0	**4**
MacDill Air Force Base, Florida	3	0	0	**3**
Joint Base Pearl Harbor-Hickam, Hawaii	2	1	1	**4**
Naval Air Station Sigonella, Italy	0	0	1	**1**
Total	**32**	**7**	**5**	**44**

Source: GAO summary of Department of Defense information. I GAO-17-582

Thirteen of the 44 executive aircraft are designated as service secretary controlled aircraft. The primary mission for these 13 aircraft is to transport the military departments' Secretaries, Chiefs of Staff, and other senior officials such as the Undersecretaries and Vice Chiefs of Staff.[6] Service secretary controlled aircraft also support travel for members of congress and for White House support missions[7], including for cabinet-level officials. In addition, 9 of the 44 executive aircraft are designated for use by the Commanders of the Combatant Commands.

As of May 2017, the Army owned and operated 121 of the 243 nonexecutive aircraft. U.S. Africa Command leased one aircraft, and the remaining 121 aircraft belonged to the U.S. Special Operations Command, Marine Corps, Navy, and Air Force, which respectively owned 21, 25, 33, and 42 aircraft. Of the Air Forces' 42 nonexecutive aircraft, 18 were designated for Defense Intelligence Agency or Defense Security Cooperation Agency support to overseas locations.

Approval Authorities for the Use of Government Aircraft and Air Travel

Multiple officials have responsibilities for approving the use of government aircraft and air travel. Specifically, the Secretaries of the Military Departments, the Chairman of the Joint Chiefs of Staff, and Combatant Commanders review and approve requests within their respective commands. In addition, the Office of the Secretary of Defense Executive Secretary and the Assistant Secretary of Defense for Legislative Affairs prioritize and approve requests within their approval authorities. Table 3 summarizes the responsibilities for approving requests for use of government aircraft.

[6] All of the Army and Navy OSA executive aircraft are service secretary controlled aircraft. One of the Air Force's OSA executive aircraft is a service secretary controlled aircraft. However, unlike the other services, the Air Force also has service secretary controlled aircraft in its OSA nonexecutive fleet—four C-21 aircraft. None of the services' eleven, large C-40 executive aircraft are service secretary controlled aircraft.

[7] White House support missions are trips provided by DOD and directed by the President such as travel for cabinet-level officials, the Vice-President, and First Lady.

Table 3: Government Aircraft Approval Authorities

Approval Authority	Responsibilities
Assistant Secretary of Defense for Legislative Affairs	Approves and prioritizes all requests for congressional air travel, except for transportation within the approval authority of the Secretaries of the Military Departments, the Chairman of the Joint Chiefs of Staff, and the CCDRs
Executive Secretary of the Department of Defense	Approves transportation requests for all non-Department of Defense officials and all Department of Defense senior officials within the Office of Secretary of Defense and the Defense agencies, except for those requests delegated to the Secretaries of the military departments, the Chairman of the Joint Chiefs of Staff, and the CCDRs
Secretaries of the Military Departments	Reviews and approves government air requests from within their respective departments
Chairman of the Joint Chiefs of Staff	Approves requests for transportation for members assigned to the Joint Staff
Combatant Commanders (CCDRs)	Reviews and approves government air requests from Department of Defense senior officials within their respective commands
	Approves transportation of foreign officials on Department of Defense operational support airlift, for travel within the CCDRs overseas area of accreditation or responsibility and on a non-interference basis

Source: GAO analysis of Department of Defense Directive 4500.56. I GAO-17-582

Required and Authorized Users

DOD guidance sets clear priorities for the use of its aircraft to support officials in certain positions within the department. Specifically, the guidance lists 26 required DOD users and 35 authorized DOD users of government aircraft[8] who are categorized into four tiers. DOD's highest priority (tier one) travelers are required to use government aircraft for both official and unofficial travel while tier two travelers are required to use government aircraft only for official travel.[9] The Secretary of Defense prioritizes tier one and tier two officials as travelers that are required to use government aircraft because there is a continuous requirement for secure communications; a threat exists that could endanger lives; or there is a need to satisfy exceptional scheduling requirements that make commercial transportation unacceptable. DOD's tier three and four

[8] DOD Directive 4500.56, *DOD Policy on the Use of Government Aircraft* (Apr. 14, 2009)(incorporating change 3, June 24, 2014). While DOD's policy documents apply broadly to travel on government aircraft that include both OSA executive and non-executive aircraft, as well as non-OSA military aircraft, the first objective in this report presents statistics that focus only on the OSA executive fleet of aircraft.

[9] Official travel is defined as travel for official government business, and unofficial travel is defined as travel for reasons unrelated to official government business—such as travel for personal or political purposes.

travelers are not required to use government aircraft, but are authorized to use the aircraft for official travel when the demands of their travel prevent the use of commercial aircraft.

DOD's aircraft are also used to support employees and members of Congress and White House support missions—a user pool which could total over 550 users. Table 4 lists the required and authorized users of DOD's aircraft.

Table 4: Users of the Department of Defense (DOD) Aircraft

Traveler	Required to Use Executive Aircraft for Unofficial Travel	Required to Use Executive Aircraft for Official Travel[a]	Authorized to Use Executive Aircraft for Official Travel[b]
DOD Tier One			
(4 users)			
Secretary of Defense	✓	✓	
Deputy Secretary of Defense			
Chairman of the Joint Chiefs of Staff			
Vice Chairman of the Joint Chiefs of Staff[c]			
DOD Tier Two			
(22 users)			
Secretaries of the Military Departments			
Chiefs of the Military Services			
Chief of the National Guard Bureau Commander of Resolute Support Mission			
(formerly International Security Assistance			
Force – Afghanistan)		✓	
Commander of United States Forces Korea			
Commanders of Combatant Commands			
Under Secretary of Defense for Acquisition, Technology, and Logistics			
Under Secretary of Defense for Intelligence			
Under Secretary of Defense for Policy			

Traveler	Required to Use Executive Aircraft for Unofficial Travel	Required to Use Executive Aircraft for Official Travel[a]	Authorized to Use Executive Aircraft for Official Travel[b]
DOD Tier Three			
(24 users)			✓
Commander of Air Combat Command			
Commander of Air Education and Training Command			
Commander of Air Force Materiel Command			
Commander of Air Force Space Command			
Commander of Air Mobility Command			
Commander of U.S. Army Materiel Command			
Commander of U.S. Army Forces Command			
Commander of Pacific Air Forces			
Commander of U.S. Army Training and Doctrine Command			
Commander of U.S. Air Forces in Europe			
Commander of U.S. Fleet Forces Command			
Commander of U.S. Naval Forces Europe			
Commander of U.S. Naval Forces Africa			
Commander of U.S. Pacific Fleet			
Commanding General U.S. Army Pacific			
Director of Naval Nuclear Propulsion			
Vice Chiefs of the Military Services[d]			
Under Secretaries of the Military Departments[e]			
DOD Tier Four			
(11 users)			
Deputy Commanders of the Combatant Commands[f]			
Under Secretary of Defense (Comptroller)/Chief Financial Officer			✓
Under Secretary of Defense for Personnel and Readiness			
White House Support Mission			
(at least 23 users)	✓	✓	
Vice President[g]			
First Lady		✓	
Other White House Support Missions			
Cabinet-level officials			✓
Presidential emissaries[h]			

Traveler	Required to Use Executive Aircraft for Unofficial Travel	Required to Use Executive Aircraft for Official Travel[a]	Authorized to Use Executive Aircraft for Official Travel[b]
Congress			
(at least 535 users)			
Members of Congress			✓
Employees of Congress			

Source: GAO analysis of Department of Defense (DOD) guidance including DOD Directive 4500.56, DOD Directive 4515.12, and DOD Instruction 4500.43. I GAO-17-582

Legend: ✓ Indicates if travelers are required or authorized to use Department of Defense aircraft

[a]Tier-two users are required to use government aircraft for official travel, and are authorized to use government aircraft for unofficial travel by request.

[b]Tier-three and tier-four users are not authorized to use executive aircraft for unofficial travel.

[c]The Vice Chairman of the Joint Chiefs of Staff is a required user for official travel. The Vice Chairman, when acting as Chairman of the Joint Chiefs of Staff, is a required user for official and unofficial travel.

[d]The Vice Chiefs of the Military Services are tier-two travelers when acting as the Chiefs of the Military Services.

[e]The Under Secretaries of the Military Departments are tier-two travelers when acting as the Secretaries of the Military Departments.

[f]The Deputy Commanders of the Combatant Commands are tier-two travelers when designated in writing as the acting Combatant Commander by the Secretary of Defense.

[g]All Vice Presidential travel, other than for political purposes, is official travel. Travel by the Vice President for political purposes must be reimbursed at the low-first-class rate, plus federal excise tax, plus one dollar.

[h]A Presidential emissary refers to an individual who is not a full-time employee of the government, and who is specifically appointed by the President to conduct a mission or trip on the President's behalf.

White House support missions are trips provided by DOD and directed by the President such as travel for cabinet-level officials, the Vice-President, and First Lady.[10]

DOD guidance supports travel for members and employees of Congress when approved by the Assistant Secretary of Defense for Legislative Affairs.[11] DOD supports travel for congressional users when the purpose of travel is related to DOD programs or activities. DOD guidance does not

[10] This review does not include Presidential travel because Presidential travel is exempt from the DOD OSA regulations. Travel by the Vice President, First Lady, family members and guests for political purposes must be reimbursed at the low-first-class rate, plus federal excise tax, plus one dollar. Family members accompanying the President or Vice President, who do not engage in political activities, travel on a non-reimbursable basis.

[11] DOD Directive 4515.12, *DOD Support for Travel of Members and Employees of Congress*, (Jan. 15, 2010).

support travel for congressional users if a commercial flight is able to meet the users' departure and arrival requirements within a 24-hour period. However, if the trip includes unusual circumstances, such as a clear and present danger or other compelling operational considerations that make commercial transportation unacceptable, then congressional users may use military aircraft.

Executive Aircraft Supported Thousands of Annual Flights for a Variety of Users and for Select Flights DOD Generally Followed Its Guidance for Approving Use

During calendar years 2014 through 2015, government and military officials took more than 19,000 flights on OSA executive aircraft, and our review of a nongeneralizable, random sample of flight packages from calendar years 2014 and 2015 found that DOD generally followed its guidance for approving use of these aircraft for these selected flights.

Executive Aircraft Use

We analyzed the data for executive flights conducted during calendars years 2014 and 2015, and found that there were a total of 19,752 flights.[12] In both calendar years most of the flights were flown by authorized, but not required users, as shown in Table 5.

[12] DOD officials stated that due to sequestration in 2013, the amount of flights taken in 2014 were less than the number of flights taken in prior years.

Table 5: Number of Executive Flights Operated by the Department of Defense (DOD), Calendar Years 2014-2015

	Required Users				Authorized Users			
Calendar Year	Tier One	Tier Two	Tier Three	Tier Four	Other[a]	White House Support Mission	Congressional Delegations	Total
2014	434	3,458	2,275	133	2,440	1,365	411	**10,516**
2015	453	1,809	1,915	100	3,319	1,067	573	**9,236**
Total	**887**	**5,267**	**4,190**	**233**	**5,759**	**2,432**	**984**	**19,752**
	(4%)	**(27%)**	**(21%)**	**(1%)**	**(29%)**	**(12%)**	**(5%)**	**(100%)[b]**

Source: GAO analysis of Department of Defense's executive flight data. I GAO-17-582

[a]This table combines some flight data that was categorized in non-specific terms such as "below tier 2 user" in the other column. According to Department of Defense officials, most of the numbers in this "other" column reflect use by tier-three and tier-four users, but some of the data may also capture White House support missions and Congressional delegations. Therefore the percentages that are listed for each of those four traveler categories should be regarded as minimum bounds. In other words, they respectively comprised at least 21, 1, 12, and 5 percent of the missions.

[b]Individual column percentages add to 99 rather than 100 percent due to rounding.

During calendar years 2014 and 2015, DOD's four tier one required users accounted for 4 percent of the total executive flights. Its 22 required tier two users accounted for another 27 percent of the total. The remaining 69 percent of the flights were taken by the hundreds of personnel who were authorized, but not required, to use DOD's executive aircraft.

As indicated in table 5, 29 percent of the total executive flight data was categorized in non-specific terms such as "below tier 2 user". Consequently, it is not possible to provide exact percentages of flight usage for each of the different authorized user categorizes. However, based on the 2014 and 2015 authorized user flight data that was specifically categorized, the following users accounted for at least these percentage of the total flights: tier-three users, 21 percent; tier-four users, 1 percent; White House support mission users, 12 percent; and Congressional delegations, 5 percent. According to DOD officials, most of the non-specific flights were for tier-three-and-four users, but some of the flights were for White House support missions or Congressional delegations.

Additional analyses of the calendar year 2014 and 2015 flight data showed that usage rates varied both within and across months and years. For example, in calendar year 2014, the number of daily flights ranged from a low of 2 flights on December 30, 2014, to a high of 70 flights on December 8, 2014. In calendar year 2015, the low ranged from 2 flights on April 5, 2015, to a high of 51 flights on December 18, 2015, and March 31, 2015. During calendar years 2014 and 2015, the executive flights

went to over 1,000 locations, and the ten most visited destinations accounted for about 40 percent of those flights. Those locations included Joint Base Andrews in Maryland; Ramstein Air Base in Germany; MacDill Air Force Base in Florida; Scott Air Force Base in Illinois; and Stuttgart Airport in Germany.[13]

DOD officials told us that they often see high demand for executive aircraft to support congressional users during congressional recess periods. We found that users in all categories, including congressional, White House support missions, as well as required DOD, and all other authorized users, flew on most days during the 2014 and 2015 two-week spring and four to five-week summer congressional recess periods.[14] However, when we analyzed the total numbers of daily flights, we found that most of days with 40 or more executive flights occurred outside the congressional recess period in calendar year 2014 or 2015, and only one day—during the 2015 spring recess, occurred within those periods.[15] In total, during calendar year 2014, there were 71 days where OSA aircraft flew 40 or more flights, and in 2015 there were 23 days with 40 or more flights.

DOD officials told us that they generally prioritize White House support missions and congressional users over tier three or four authorized users. However, at times they are unable to accommodate congressional travelers due to number of participants and distance of travel requirements. DOD officials stated that congressional requests often include larger participant sizes and overseas travel; however, there are a limited number of executive aircraft that can accommodate larger groups and fly long distances. DOD guidance specifies that large executive aircraft (i.e., capable of carrying 15 or more passengers) will be approved

[13] The top 10 executive flight destinations listed from most visited to least are: Joint Base Andrews, Maryland; Ramstein Air Base, Germany; MacDill Air Force Base, Florida; Scott Air Force Base, Illinois; Stuttgart Airport, Germany; City of Colorado Springs Municipal Airport, Colorado; Hamid Karzai International Airport, Afghanistan; Offutt Air Force Base, Nebraska; Shannon International Airport, Ireland; and Miami International Airport, Miami.

[14] The Spring recess dates were: April 12-27, 2014, and March 28–April 12 , 2015; the Summer recess dates were: August 2–September 7, 2014, and August 8–September 7, 2015.

[15] The executive OSA fleet has been gradually declining in size—from 49 aircraft in September 2013 to 44 aircraft in March of 2017. Given that the OSA executive fleet size was not uniform throughout all of 2014 and 2015, and with a preliminary review of the flight data, we decided to report the number of days with 40 flights as measure of relatively high usage of the fleet.

only for groups of 5 or more members of Congress. The Air Force has two types of large executive aircraft (C-40s and C-32s).[16] In calendar years 2014 and 2015, we found that 76 percent of the congressional user flights used C-40 executive aircraft, which seat up to 36 passengers and can fly 5,000 nautical miles without refueling.[17]

In 2007, DOD established the Executive Airlift Scheduling Activity to facilitate sharing of executive aircraft among the military services and combatant commands when requests exceed capacity. Multiple officials from the services and DOD's components told us that this sharing approach generally works, and that services usually agree to use their service secretary controlled aircraft to fly officials outside of their service, when asked. Our analysis showed that service secretary controlled aircraft accounted for 13 percent of the executive flights in 2014, and 15 percent of the executive flights in 2015. Table 6 shows that while service secretary controlled aircraft generally flew users from within their associated service, approximately 18 percent of service secretary controlled flights supported users from outside their service.

Table 6: Service Secretary Controlled Executive Aircraft Use, Calendar Years 2014-2015

Service Secretary Controlled Aircraft	Users from the Same Service	Users from outside of the Service	Total
Navy (5)	1,079	290	**1,369**
Army (7)	1,176	200	**1,376**
Air Force (1)	50	0	**50**
Total (13)	**2,305 (82%)**	**490 (18%)**	**2,795 (100%)**

Source: GAO analysis of Department of Defense data. I GAO-17-582

[16] The C-40 aircraft is a Boeing 737 equivalent, and the C-32 aircraft is a Boeing 757 equivalent.

[17] Most of the flights taken by congressional users during calendar years 2014 and 2015 were on C-40C aircraft. The C-40C aircraft seat up to 36 passengers and the C-40B aircraft seat up to 24 passengers. The Air Force's 11 C-40 aircraft are distributed as follows: 5 at Joint Base Andrews in Maryland; 4 at Scott Air Force Base in Illinois; 1 at Joint Base Pearl Harbor-Hickam in Hawaii; and 1 at Ramstein Air Base in Germany.

DOD Generally Followed Its Approval Guidance for a Select Set of Executive Flights Reviewed

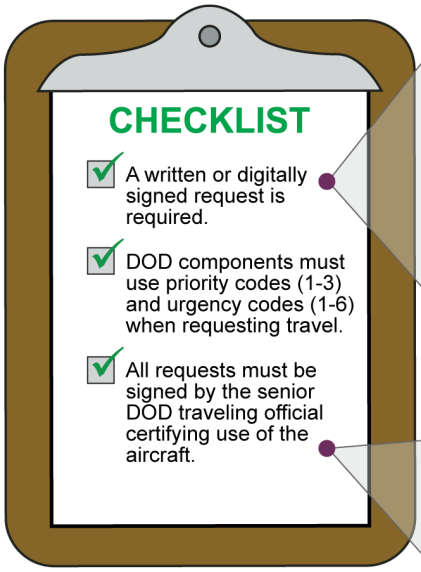
We analyzed flight request packages from a nongeneralizable, random sample of 53 executive flights taken during calendar years 2014 through 2015[18] and, consistent with a report we issued in 2014,[19] we found that for these select flights DOD generally followed its guidance for approving executive aircraft use. The Secretaries of the Military Departments and Combatant Commanders review and approve OSA aircraft requests within their respective Departments and Commands. The Air Force Deputy Chief of Staff for Operations, Plans and Requirements is also responsible for scheduling congressional and White House support missions. DOD guidance defines a list of procedures for approving the use of OSA.[20] As shown in Figure 1, DOD guidance requires each OSA flight request package to contain specific information, such as the name and rank of traveler, itinerary, cost comparison if needed, and appropriate signatures.

[18] The randomly identified 53 flight request packages are not generalizable to 19,752 executive flights during calendar years 2014 and 2015.

[19] In 2014, GAO reported that DOD and other federal agencies followed DOD guidance for approving the use of executive aircraft. However, the 2014 report only assessed use of the 15 executive aircraft assigned to the 89th Airlift Wing at Joint Base Andrews. GAO, Defense Transportation: *DOD Can Better Ensure That Federal Agencies Fully Reimburse for Using Military Aircraft.* GAO-14-189 (Washington, D.C.: Feb. 2014).

[20] DOD Instruction 4500.43, *Operational Support Airlift (OSA)* (May 18, 2011)(incorporating change 1, June 26, 2013).

Figure 1: Checklist for Approving the Use of Operational Support Airlift Executive Flights[a]



i. Required user (tier 1 for official and unofficial travel and tier 2 for official travel) requests must include:
- a. Name(s) and title(s) (or grade or rank) of all travelers.
- b. Purpose of travel.
- c. Itinerary, including required departure or arrival times.
- d. Unofficial travel may be performed upon advance notification and approval of the Secretary of Defense. All travelers including family members or other invited guests shall reimburse the government for any unofficial travel at the full coach fare.

ii. Authorized user requests must include:
- a. Names and titles (or grade or rank) of all travelers.
- b. Military Department or agency of all travelers.
- c. Purpose of travel.
- d. Itinerary, including required departure or arrival times, and an explanation as to why scheduling requirements cannot be changed to permit the use of commercial air.
- e. Justification to include a statement of commercial air costs.
- f. A statement that the travel policy requirements of Department of Defense (DOD) guidance have been met.
- g. Signature of the senior traveling official and appropriate authorizing official. This signature authority may not be delegated.
- h. Requests for unofficial travel must include:
  - i. A statement of intent to reimburse the government for the full coach fare.
  - ii. Amount required to be reimbursed to the government, with an airline reservation printout reflecting the full coach fare attached.
  - iii. Travelers accompanying a DOD official on government aircraft, including family members or other invited guests, shall reimburse the government for any unofficial travel at the full coach fare.

This signature authority may not be delegated. However, signed requests are not required for DOD-approved senior officials with documentation from the Executive Secretary of Defense or the Assistant Secretary of Defense of Legislative Affairs (ASD (LA)) validating the travel request.
- a. The Secretaries of the Military Departments, the Chairman of the Joint Chiefs of Staff, and Combatant Commanders review and approve requests within their respective chains of command.
- b. The DOD Executive Secretary approves requests for all non-DOD officials, and all DOD senior officials within OSD and the Defense agencies, with the exception of those requests delegated to the Secretaries of the Military Departments, the Chairman of the Joint Chiefs of Staff, and the Combatant Commanders.
- c. ASD (LA) approves and prioritizes all requests for members and employees of Congress, and other congressional delegations sponsored by the Secretary of Defense, except for transportation within the approval authority of the Secretaries of the Military Departments, and the Chairman of the Joint Chiefs of Staff.

Source: GAO analysis of Department of Defense (DOD) guidance including DOD Directive 4500.56 and DOD Instruction 4500.43. | GAO-17-582

[a]DOD Instruction 4500.43 instructs DOD to use priority and urgency codes when requesting OSA aircraft. These codes include priority codes 1-3 and urgency codes 1-6. For example priority code 1 includes OSA flight requests for airlift in direct support of operational forces engaged in combat, contingency, or peacekeeping. Urgency code 1 includes requests for Airlift of personnel or materiel in direct support of forces alerted for or engaged in combat or contingency operations.

Although some packages were missing items, we did not find evidence to suggest the requested flight should have been disapproved. Specifically, 51 of the 53 flight request packages listed the names and titles or ranks of travelers, and 43 of the 53 flight request packages included a signed request. In addition, 42 out of the 53 flight request packages included the purpose of travel and 40 out of the 53 flight request packages included the senior DOD traveling official's signature certifying use of the aircraft. We also found that 24 out of the 53 flight request packages were for authorized users. The request packages for authorized users are required to include additional information and we found that most of the packages included most of the information. For example, all of the 24 packages included the military department or agency of travelers, and 20 of 24 packages included a statement that the travel requirements of DOD

guidance have been met. In addition, 17 of 24 packages included documentation such as an explanation as to why scheduling requirements could not be changed to permit the use of commercial air, and a justification to include a statement of commercial air costs. We discussed any items that were missing with DOD officials and did not find evidence to suggest the requested flights should have been disapproved.

DOD Recently Implemented an Annual OSA Validation Process

In recent years, DOD has implemented a consistent process to validate the size of its OSA fleet. The process results in a general determination of the sufficiency of the OSA inventory, and the 2015 and 2016 determinations were expressed in terms of risks to mission accomplishment. The services do not generally use the validation process determinations as a basis for their OSA aircraft procurement and divestment decisions.

OSA Guidance and the Current Validation Process

In 2011, guided by a memorandum from the Vice Chairman of the Joint Chiefs of Staff and DOD Instruction 4500.43, Operational Support Airlift, DOD began to implement a structured, repeatable approach to validate its OSA fleet on an annual basis, to comply with Office of Management and Budget guidance.[21] The Vice Chairman's memorandum established working and steering groups to provide input and oversight to the process and the instruction laid out many of the details of the new fleet validation process.[22] The instruction assigned DOD and service officials a variety of responsibilities with regard to OSA aircraft. For example, in addressing the need to gain efficiencies by sharing aircraft and flight data across the department, it specifically instructed each of the military department secretaries and the combatant commanders to budget for the costs of

[21] Vice Chairman of the Joint Chiefs of Staff Memorandum, *Operational Support Airlift (OSA)* (Nov. 18, 2011), and DOD Instruction 4500.43, *Operational Support Airlift (OSA)* (May 18, 2011) (incorporating change 1, June 26, 2013). In accordance with Office of Management and Budget guidance from 1992, DOD is required to validate its OSA aircraft inventory and requirements to determine the sufficiency of its fleet, and dispose of any excess aircraft. See OMB Circular No. A-126, *Improving the Management and Use of Government Aircraft*, (May 22,1992).

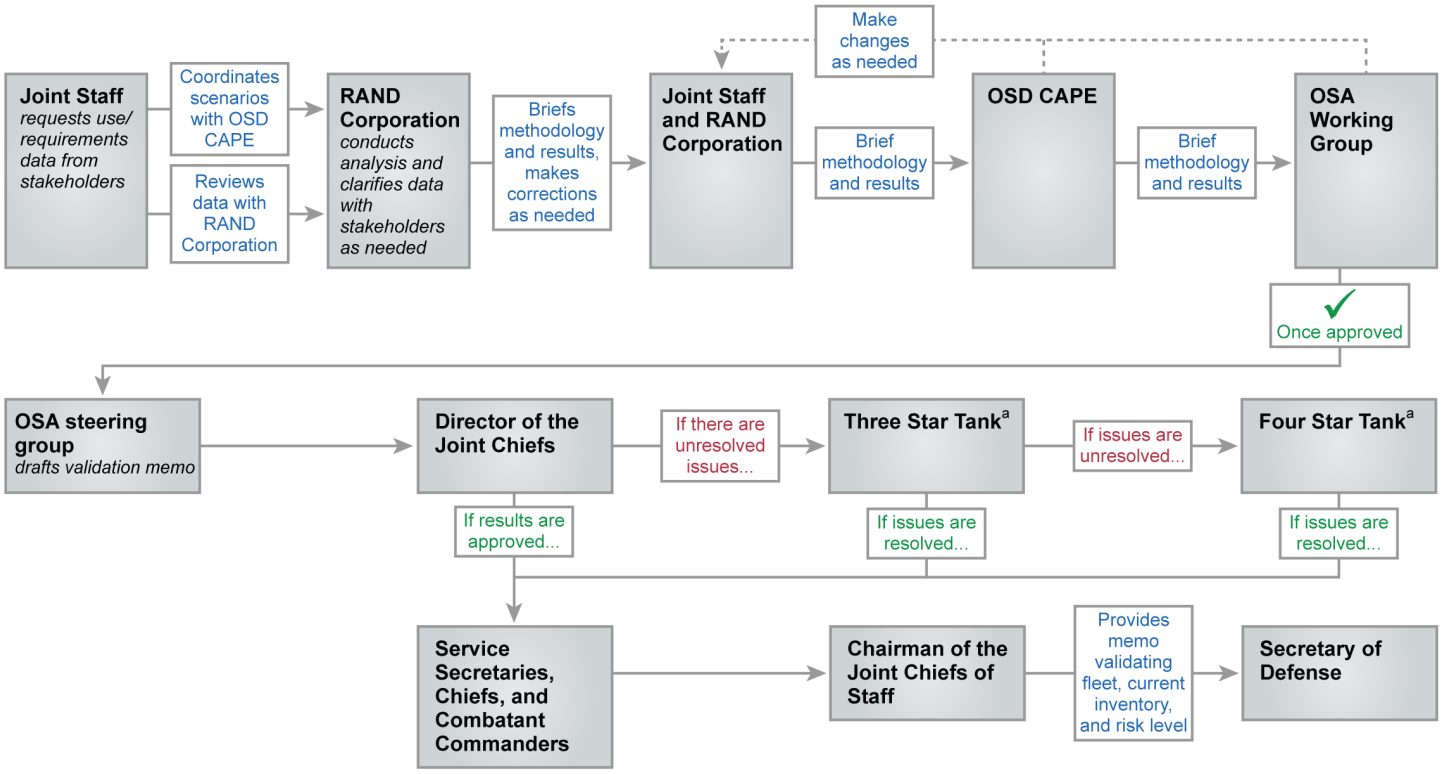
[22] The groups are made up of representatives from the military departments, the combatant commands, the Defense Intelligence Agency, the Defense Security Cooperation Agency, the National Guard Bureau, and the Office of the Secretary of Defense, and they are each chaired by a representative from the Joint Staff Logistics Directorate. Members of the working group are O-6 military officers or civilian personnel of equivalent levels while members of the steering group are General or Flag officers or civilian personnel of equivalent levels.

their OSA aircraft, and to manage those aircraft as required to maximize wartime readiness, efficiency, cost-effectiveness and peacetime utilization.

DOD Instruction 4500.43 noted that DOD is required to conduct validations of its OSA aircraft inventory and requirements to determine the sufficiency of the fleet, and it instructed the Chairman of the Joint Chiefs of Staff to conduct an annual OSA aircraft review and to provide the results to the Secretary of Defense. The instruction lists a wide range of requirements that the fleet validation is to be based upon. These include: peacetime engagement and support; travel for members of Congress; travel for DOD's required-use travelers; and a range of wartime requirements associated with contingency scenarios, specific contingency plans and concepts of operation, steady-state campaigns, posture planning efforts, and general and direct support.

The OSA validation process begins when the Joint Staff and an independent contractor collect and analyze data from the services and combatant commands. The results of the analysis are then presented to the working and steering groups, and may go through additional reviews before the process concludes with a memorandum from the Chairman of the Joint Chiefs of Staff to the Secretary of Defense, which validates the fleet and addresses risk. Figure 2 shows the full extent of the process, and shows that some steps can be omitted if there are no disagreements or contentious issues to resolve.

Figure 2: Department of Defense Operational Support Airlift Validation Process



OSD CAPE Office of the Secreatary of Defense Cost Assessment and Program Evaluation
OSA Operational Support Airlift

Source: GAO synthesis of interviews with Joint Staff officials. | GAO-17-582

[a]"Tanks" refer to the meetings (normally held weekly) in the Joint Chiefs of Staff conference room.

Validation Process Results in a General Determination of OSA Fleet Sufficiency

In recent years, the OSA validation process has resulted in a general determination of the sufficiency of the OSA fleet to meet requirements. This determination has been reported annually in memorandums from the Chairman of the Joint Chiefs of Staff to the Secretary of Defense.[23] Throughout the validation process, the OSA aircraft inventory is compared to a broad set of requirements. Some of the anticipated future requirements are estimated based on historical aircraft usage rates. For

[23] The memorandums have been issued in the year following the validation year. For example, the 2013 validation memorandum was issued in 2014, and the 2016 validation memorandum was issued in 2017.

example, executive aircraft requirements are estimated based on the past usage of executive aircraft by DOD's required users, Congressional users, and White House directed travelers. Because the usage of these travelers can vary from year to year, the Chairmen's memorandums[24] refer to the requirements as estimates, and consequently, address the ability of the OSA fleet to meet these requirements in general terms. Table 7 shows that the size of the OSA fleet has declined each year since 2013, as well as the Chairmen's assessments.

Table 7: Operational Support Airlift (OSA) Validation Memorandums, 2013-2016

Validation Year	2013	2014	2015	2016
Date of the Chairman of the Joint Chiefs of Staff's OSA validation memorandum	4/8/2014	4/21/2015	1/16/2016	3/9/2017
Size of the OSA Validation Year Fleet	336 aircraft	309 aircraft	304 aircraft	301 aircraft
Results of the OSA validation process	OSA inventory of 336 aircraft satisfies the highest estimated demand to support required user travel and Joint/Combatant Command/Service requirements[a]	OSA inventory of 309 aircraft satisfies the highest estimated demand to support required user travel and Joint/Combatant Command/Service requirements[b]	Service efficiencies and program reductions reduced the OSA fleet to 304 aircraft. This poses moderate risk to the executive fleet and low risk to the nonexecutive fleet	Service efficiencies and program reductions reduced the OSA fleet to 301 aircraft. This poses moderate risk to the executive fleet and low risk to the nonexecutive fleet

Source: GAO analysis of DOD data. I GAO-17-582

[a]The Chairman's memorandum noted that, based on the two most likely integrated security constructs, a nonexecutive fleet of 252 to 287 aircraft was needed.

[b]The Chairman's memorandum noted that the executive fleet fully meets requirements while the nonexecutive fleet adequately meets requirements

The Chairman's validation memorandums for 2015 and 2016 expressed the sufficiency of the OSA fleet in terms of risk, based on a risk matrix developed by the OSA working group in 2014. The OSA risk matrix categorizes risks as low, moderate, significant, or high based on the percentage of days DOD expects to be able to conduct all its required

[24] Chairman of the Joint Chiefs of Staff, General Martin E. Dempsey issued the validation memorandums for 2013 and 2014 while General Joseph F. Dunford, Jr. issued the validation memorandums for 2015 and 2016.

missions.[25] In Table 8, we have converted the working group's risk-level percentages to numbers of days in a year.

Table 8: Operational Support Airlift Risk Matrix (Number of days when the department expects to be able to fill all required missions)

	Required Executive Missions		High Priority Nonexecutive Missions	
Risk to mission	Percent of Days in a year	Number of days per year	Percent of Days in a year	Number of days per year
Low	100%-94%	365-343[a]	100%-94%	365-343[a]
Moderate	93.9%-92%	343-336[a]	93.9%-88%	343-321[a]
Significant	91.9%-90%	335-329	87.9%-83%	321-303[a]
High	≤89.9%	≤328	≤82.9%	≤303[a]

Source: GAO summary of Department of Defense Data I GAO-17-582

[a]Due to rounding, there are overlaps when the working group's percentages are converted to days.

The Chairman's 2016 OSA fleet validation memorandum indicated that with a fleet of 45 executive aircraft the risk to mission accomplishment was moderate; and the mission risk for the nonexecutive fleet of 256 aircraft was low. Based on the risk matrix, this means DOD should be able to meet all of the flight requests for tier one and tier two users, White House directed travelers, and Congressional members and delegations, on between 336 and 343 days of the year. Stated more simply, those users can expect a shortage of available executive aircraft to affect some travel plans between 22 and 29 days of the year. Similarly, DOD expects that its nonexecutive aircraft may be unable to meet some mission requirement on up to 22 days of the year.

[25] According to Joint Staff officials, the working group relied on the Chairman of the Joint Chiefs of Staff Instruction 3401.01E, *Joint Combat Capability Assessment* (Apr. 13, 2010)(current as of May 19, 2014) for general guidance concerning risk assessments, but the group used the collective judgement of its members to develop the actual ranges for the matrix. The matrix is used to assess the department's ability to meet executive demand for tier 1 and 2 users, White House directed travelers, and Congressional members and delegations. On the nonexecutive side, it is used to assess the department's ability to meet most of the authorized missions, but it does not assess the ability to meet peacetime support missions.

Services Generally Make Force Structure Decisions Independent of the Validation Process

The Chairmen's validation memorandums are generally not used to support OSA aircraft procurement or divestment decisions. As previously noted, OSA guidance instructs the military department secretaries and the combatant commanders to budget for the costs of their OSA aircraft, and to manage those aircraft as required to maximize wartime readiness, efficiency, cost-effectiveness and peacetime utilization. Service officials told us their decisions to divest or replace OSA aircraft are generally made based on internal service assessments concerning the age and maintenance condition of the aircraft, and the need to balance OSA aircraft requirements against other service priorities. For example, Navy and Army officials said that they retired C-20 aircraft because the aircraft were old and expensive to maintain.

On April 8, 2014, when General Dempsey issued the first annual OSA validation memorandum, he included an attachment which showed that the services and U.S. Special Operations Command had programed reductions of 68 aircraft and he recommended the exact same reduction in the size of the OSA fleet (from 344 to 276 aircraft) through fiscal year 2019. The subsequent validation memorandums, for the 2014, 2015, and 2016 fleets, did not contain any specific recommendations for force structure changes, but each memorandum noted that the services were continuing to identify efficiencies and program reductions in their OSA fleets.[26]

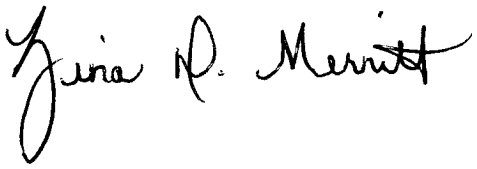
[26] The services have adjusted their programmed reductions somewhat over the years. Whereas the 2013 memorandum showed programmed reductions of 66 aircraft by the end of fiscal year 2016, the services actually divested 59 aircraft over that period. The services also procured 16 OSA aircraft during that period.

Agency Comments

We are not making recommendations in this report. DOD provided technical comments on a draft of this report, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees; the Secretary of Defense; the Under Secretary of Defense for Acquisition, Technology and Logistics; the Chairman of the Joint Chiefs of Staff; the Secretaries of the Military Departments, and the Commandant of the Marine Corps; the Commander of the United States Transportation Command; and other interested parties. The report is also available at no charge on GAO's website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-5257 or merrittz@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.



Zina D. Merritt
Director
Defense Capabilities and Management

List of Addressees

The Honorable John McCain
Chairman
The Honorable Jack Reed
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Thad Cochran
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The Honorable Richard Durbin
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Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Mac Thornberry
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The Honorable Adam Smith
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The Honorable Pete Visclosky
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The Honorable Bob Corker
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Appendix I: Operational Support Airlift (OSA) Mishap Data

The Department of Defense (DOD) defines an aircraft mishap as an event resulting in death, injury, illness or property damage. DOD guidance defines four categories or classes of mishaps according to severity:[1]

- Class A: Mishap resulted in a fatality, a permanent total disability, damage equal to or greater than $2 million, or a destroyed aircraft.
- Class B: Mishap resulted in a permanent partial disability, damage equal or greater than $500,000, but less than $2 million, or hospitalization for inpatient care of three or more individuals (not including observation or diagnostic care).
- Class C: Mishap resulted in a nonfatal injury or occupational illness that caused loss of one or more days from work not including the day or shift it occurred, or damage equal or greater to $50,000, but less than $500,000.
- Class D: Mishap resulted in a recordable injury or illness not otherwise classified as Class A, B, or C, or damage equal or greater to $20,000, but less than $50,000.

While any reportable mishap is, by definition, a matter of concern, the rate of mishaps per flight (or sortie) is low for OSA aircraft. Complete historical flight data is not available for the OSA fleet. However, a calculation based on an extrapolation that uses the average sortie numbers from the 2016 OSA validation process analysis would yield a rate of 7 mishaps for every 10,000 sorties.[2] Furthermore, DOD classifies its class A and B mishaps as its serious mishaps, and these mishaps accounted for 22 of the 174 total OSA mishaps from fiscal years 2007 through 2016. See Table 9 for the complete mishap data for that period.

[1] DOD Instruction 6055.07, *Mishap Notification, Investigation, Reporting, and Record Keeping* (June 6, 2011).

[2] The 2016 OSA validation analysis captured requirements for tier one, tier two, White House support missions and Congressional delegation use. Our analysis showed that these users accounted for 48 percent of the calendar year 2014 and 2015 executive use.

Table 9: Operational Support Airlift Mishaps (Fiscal Years 2007- 2016)

	Service			
Class of Mishap	Army	Navy / Marine Corps	Air Force	Total
A	2	2	3	**7**
B	2	4	9	**15**
C	24	43	53	**120**
D	0	7	25	**32**
Total	**28**	**56**	**90**	**174**

Source: GAO summary of service data. I GAO-17-582

Appendix II: Information on Maintenance of Operational Support Airlift (OSA)

Based on our interviews with service maintenance officials and analysis of service maintenance data, we found that:

- Contractors perform almost all executive and nonexecutive OSA aircraft maintenance, including most organizational-level and depot-level maintenance.[1] In some instances, one contract covers aircraft from more than one service. For example, the Air Force manages the support contract for the Air Force, Army, and Navy C-37 aircraft.
- All the services require that maintenance for these aircraft comply with Federal Aviation Administration standards for similar types of commercial aircraft.
- Many of the OSA aircraft are more than 20-years-old.
- Upcoming depot maintenance and modification periods will reduce the availability of 2 or 3 C-32 and 2 or 3 C-40B executive aircraft. According to Air Force officials, various capability upgrades and modifications will be made so the planes can continue to meet Federal Aviation Administration standards and customer requirements. Each of the maintenance and modification actions is scheduled to take between 10 days and 9 months. In response to this situation, in June 2016, the Executive Secretary sent a memorandum to the military departments, the Assistant Secretary of Defense for Legislative Affairs, and others in DOD, with a copy to the Director of the White House Military Office, alerting them that availability of these larger capacity aircraft will be limited until 2018[2]. The memorandum also asked the addressees to be prepared for flight cancellations due to short notice higher priority missions and to always have commercial air transportation planned as a backup.
- As shown in tables 10 (Air Force), 11 (Army), and 12 (Navy), many OSA aircraft are over 20 years old and have availability or mission capable rates around or above 70 percent.[3] However, some OSA

[1] The only maintenance performed by military service personnel is the organizational-level maintenance for the Navy's C-40 aircraft. Organizational-level maintenance is the day-to-day minor maintenance versus the in-depth depot-level maintenance.

[2] In May, 2017, DOD officials told us that this limited availability will stretch through 2019 and could possibly extend to 2020.

[3] Aircraft availability is the number of mission capable aircraft that are available for a specified time period. The mission capable rate is the number of possessed aircraft that can fly all required missions. The requirements model, which is used in the OSA validation process, assumes a 70 percent availability rate.

aircraft have lower availability rates, such as the Air Force C-37 (58 percent) and the Army C-37 (65 percent).

Table 10: Air Force Operational Support Airlift Availability and Age, Fiscal Year 2016

Aircraft Type	Aircraft Availability Percentage	Average Aircraft Age (years)
C-40 (executive)	71.00%	14.55
C-37 (executive)	58.00%	12.6
C-32 (executive)	66.10%	18.5
C-20 (executive)	60.00%	28.5
C-21 (nonexecutive but Service Secretary Controlled Aircraft)	83.00%	32.8
Overall Average	**67.66%**	**21.39**

Source: GAO analysis of Department of Defense data. I GAO-17-582

Table 11: Army Operational Support Airlift Availability and Age, Fiscal Year 2016

Aircraft Type	Aircraft Availability for Calendar Year 2016	Average Aircraft Age (years) as of December 2016
C-37 (executive)	64.58%	15
UC-35 (executive and nonexecutive)	69.73%	18
C-12 (nonexecutive)	75.80%	28
C-26 (nonexecutive)	78.00%	25
C-20 (executive)	94.27%	25
Overall Average	**76.40%**	**22.2**

Source: GAO analysis of Department of Defense data. I GAO-17-582

Table 12: Navy Operational Support Airlift Mission Capable Rates and Age, Fiscal Year 2016

Aircraft Type	Mission Capable Percentage[a]	Average Aircraft Age (years)
C-40 (nonexecutive)	85.90%	10.01
C-37 (executive)	96.86%	11.5
C-26 (nonexecutive)	97.54%	26.43
C-20 D (executive)[b]	62.70%	22
C-20 G (executive and nonexecutive)	97.61%	
C-12 (nonexecutive)	94.28%	24.36
Overall average	**89.15%**	**18.86**

Source: GAO analysis of Department of Defense data. I GAO-17-582

[a]According to Navy officials, the mission capable rate is the same as the aircraft availability rate because if the aircraft is available, then it is mission capable. When an aircraft is undergoing maintenance in the depot, it is tracked as “Not Reporting Time”.

[b]The Navy divested the C-20D at the end of fiscal year 2016.

Appendix III: Scope and Methodology

To examine the extent to which DOD used executive aircraft,[1] and the extent the usage for select flights complied with guidance, we identified and reviewed the guidance DOD and its components have in place to approve the use executive aircraft. [2] Additionally, we interviewed officials from the Joint Staff, U.S. Transportation Command, the military services, the Office of the Secretary of Defense Executive Secretary, and the Office of the Assistant Secretary of Defense for Legislative Affairs and discussed their roles in approving the use of executive aircraft. Because there was no central source for current and historical executive flight data, we obtained the most current data available—calendar year 2014 and 2015 executive aircraft flight data—from both the Joint Staff and the military services. We then analyzed the data to identify the portions of the total flights that supported various categories of DOD and non-DOD travelers. We also analyzed the calendar year 2014 and 2015 flight data by type of aircraft used. We also analyzed a nongeneralizable, random sample of 53 executive OSA flights and compared the documentation in the flight request packages to the flight package documentation requirements listed in DOD's OSA guidance. The initial scope for the sample included all 19,752 flights conducted during calendar years 2014 through 2015. We received flight information from the services that indicated departure and arrival dates, departure and arrival locations, tiers of travelers, and service of travelers. Based on this, we compiled a unique list of flights, organized by flight type (Joint Staff or service secretary aircraft) and tier (tiers one, two, three, and four; below tier 2; congressional delegation; White House; and other). We then created 9 sampling strata as described in table 13, and distributed a sample of 100 flights proportionally across the strata where the sample was designed to achieve overall 95 percent confidence intervals within +/- 10 percentage points of an attribute estimate.

[1] Since the use of executive aircraft is not tied to traditional training or operational needs, we focused our first objective on how these aircraft were used and the extent to which this usage complied with the guidance DOD established for their use.

[2] Key guidance includes: DOD Directive 4500.56, *DOD Policy on the Use of Government Aircraft and Air Travel* (Apr. 14, 2009)(incorporating change 3, June 24, 2014); DOD Instruction 4500.43, *Operational Support Airlift (OSA)* (May 18, 2011)(incorporating change 1, June 26, 2013); and DOD Directive 4515.12, *DOD Support for Travel of Members and Employees of Congress*, (Jan. 15, 2010).

Table 13: Population of Flights for GAO's Initial Sample Selection and Initial Sample Allocation

Strata	Type	Tier	Population	Sample
1	Joint Staff	Below tier 2	4075	20
2	Joint Staff	Congressional Delegation	984	5
3	Joint Staff	Tier One	887	5
4	Joint Staff	Tier Two	4047	20
5	Joint Staff	Tier Three	2722	14
6	Joint Staff	Tier Four	149	1
7	Joint Staff	White House	2432	12
8	Joint Staff	Other	1661	9
9	Service Secretary Controlled Aircraft	All	2795	14
Total			**19752**	**100**

Source: GAO analysis of Department of Defense's executive data. I GAO-17-582

In February 2017, we delivered the selected sample of 100 flights to the respective services with a request for the associated flight packages. However, we ultimately restricted our analyses to a select subset of 53 nongeneralizable flight packages for several reasons. Specifically, upon requesting flight packages, we learned that certain types of flights, for example, congressional user and combatant command flights were not collected by the services. As a result, it was determined the delivered select set of 53 flight packages could not be generalized to all flights in calendar years 2014-2015 due to the limited scope of the sampled flights with available packages and due to the small sample size, which would not provide precise estimates. We concluded that the data provided by the Joint Staff and the military services were sufficiently reliable for the purposes of our reporting objectives by interviewing each of the services and the Joint Staff about their databases used to enter and maintain flight data.

To examine the process DOD uses to validate its OSA fleet size and the extent to which the process results have influenced force structure decisions, we gathered documentation on DOD's annual OSA validation process. The documentation we reviewed included DOD guidance, meeting minutes, briefings, and a methodology paper. We also analyzed the results of the OSA fleet validation process. Since 2014, the Chairman of the Joint Chiefs of Staff has presented these results to the Secretary of Defense in an annual OSA fleet validation memorandum. We also

interviewed officials from the military services, Joint Staff, the U.S. Transportation Command, and a private contractor who supported the OSA validation process, to determine their roles in the annual validation process and to identify how the process results are used. We also discussed the basis for OSA force structure decisions with officials from the military services.

We conducted this performance audit from June 2016 to June 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix IV: Description and Pictures of Operational Support Airlift (OSA) Aircraft

Tables 14 through 22 show some key facts about DOD's different types of OSA aircraft, along with a picture of each type of aircraft.

Table 14: C-9 Aircraft

Commercial Equivalent, McDonnel Douglas DC-9-30F

Service	Marine Corps[a]	Type of Aircraft	Nonexecutive
Range	1,739 nautical miles	Capacity	90 passengers
Length	119 feet 3 inches	Wingspan	93 feet 3 inches
Maximum Altitude	37,000 feet	Cruising speed	505 knots

Data Source: Department of Defense I GAO-17-582

[a]The Marine Corps divested its C-9 aircraft during fiscal year 2017.

Figure 3: C-9 Aircraft

Source: Department of Defense. | GAO-17-582

Table 15: C-12 Aircraft

Commercial Equivalent, Hawker Beechcraft King Air 200/350

Service	Air Force, Army, Navy, and Special Operations Command	Type of Aircraft	Nonexecutive
Range	1,974 nautical miles	Capacity	19 passengers
Length	43 feet 10 inches	Wingspan	54 feet 6 inches
Maximum Altitude	35,000 feet	Cruising speed	294 knots

Data Source: Department of Defense I GAO-17-582

Figure 4: C-12 Aircraft

Source: Defense Video Imagery Distribution System. | GAO-17-582

Table 16: C-20 B/H Aircraft

Commercial Equivalent, Gulfstream III

Service	Air Force, Army, Navy, and Marine Corps	Type of Aircraft	Executive (Air Force, Army, and Navy) and Nonexecutive (Navy and Marine Corps)
Range	C-20H: 4,220 nautical miles C-20B: 4,250 nautical miles	Capacity	12 passengers
Length	C-20H: 88 feet 4 inches C-20B: 83 feet 2 inches	Wingspan	77 feet 10 inches
Maximum Altitude	45,000 feet	Cruising speed	501 knots

Data Source: Department of Defense I GAO-17-582

Figure 5: C-20 B/H Aircraft

Source: Defense Video Imagery Distribution System. | GAO-17-582

Table 17: C-21Aircraft

Commercial Equivalent, Lear Jet 35A

Service	Air Force	Type of Aircraft	Nonexecutive
Range	2,004 nautical miles	Capacity	7 passengers
Length	48 feet 7 inches	Wingspan	39 feet 6 inches
Maximum Altitude	45,000 feet	Cruising speed	461 knots

Data Source: Department of Defense I GAO-17-582

Figure 6: C-21Aircraft

Source: Department of Defense. | GAO-17-582

Table 18: C-26 Aircraft

Commercial Equivalent, Fairchild Metro 23

Service	Army and Navy	Type of Aircraft	Nonexecutive
Range	1,800 nautical miles	Capacity	19 passengers
Length	59 feet 5 inches	Wingspan	57 feet
Maximum Altitude	25,000 feet	Cruising speed	290 knots

Data Source: Department of Defense I GAO-17-582

Figure 7: C-26 Aircraft

Source: Department of Defense. | GAO-17-582

Table 19: C-32

Aircraft Commercial Equivalent, Boeing 757-200

Service	Air Force	Type of Aircraft	Executive
Range	5,500 nautical miles	Capacity	45 passengers
Length	155 feet 3 inches	Wingspan	124 feet 8 inches
Maximum Altitude	42,000 feet	Cruising speed	461 knots

Data Source: Department of Defense I GAO-17-582

Figure 8: C-32 Aircraft

Source: Department of Defense. | GAO-17-582

Table 20: C-37A/B Aircraft

Commercial Equivalent, C-37A: Gulfstream V, C-37B: Gulfstream 550

Service	Air Force, Navy, and Army	Type of Aircraft	Executive
Range	C-37A: 5,500 nautical miles C-37B: 6,750 nautical miles	Capacity	12 passengers
Length	96 feet 5 inches	Wingspan	96 feet 6 inches
Maximum Altitude	51,000 feet	Cruising speed	590 knots

Data Source: Department of Defense I GAO-17-582

Figure 9: C-37A/B Aircraft

Source: Department of Defense. | GAO-17-582

Table 21: C-40B/C Aircraft

Commercial Equivalent, Boeing 737-700

Service	Air Force	Type of Aircraft	Executive
Range	5,000 nautical miles	Capacity	C-40B: 24 passengers C-40C: 34/36 passengers
Length	110 feet 4 inches	Wingspan	117 feet 5 inches
Maximum Altitude	41,000 feet	Cruising speed	461 knots

Data Source: Department of Defense I GAO-17-582

Figure 10: C-40B/C Aircraft

Source: Department of Defense. | GAO-17-582

Table 22: UC-35 Aircraft

Commercial Equivalent, Cessna Citation 560

Service	Army and Marine Corps	Type of Aircraft	Executive and Nonexecutive
Range	1,564 nautical miles	Capacity	7 passengers
Length	48 feet 9 inches	Wingspan	52 feet 2 inches
Maximum Altitude	45,000 feet	Cruising speed	433 knots

Data Source: Department of Defense I GAO-17-582

Figure 11: UC-35 Aircraft

Source: Department of Defense. | GAO-17-582

Appendix V: GAO Contact and Staff Acknowledgements

GAO Contact

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Staff Acknowledgments

In addition to the contact named above, the following staff members made key contributions to this report: Michael Ferren, Assistant Director, Brenda M. Waterfield, David M. Ballard, Vincent M. Buquicchio, Patricia F. Donahue, Amie Lesser, Marc Meyer, Dan Royer, Leigh Ann Sheffield, and Sonya L. Vartivarian.