Congressional Budget Office
Nonpartisan Analysis for the U.S. Congress

Availability and Use of the F/A-18E/F Super Hornet Fighter Aircraft

FEBRUARY | 2023

At a Glance

In this report, the Congressional Budget Office compares the availability and use of the Department of the Navy's F/A-18E/F Super Hornet fighter and attack aircraft with the availability and use of their predecessor F/A-18C/D Hornets and other aircraft operated by the Department of the Navy and the Air Force. *Availability* is the percentage of time an aircraft can be flown on training or operational missions. *Use* is the number of hours aircraft are flown on those missions, measured in this report as average monthly flying hours per aircraft.

- **Availability Rates by Fiscal Year Are Lower and Declined Faster for Both Types of Hornets Than for the Rest of the Department of the Navy's Fleet.** Availability rates of Super Hornets declined markedly between the mid-2000s and the mid-2010s; the older F/A-18C/D Hornets experienced a longer and steeper drop. Both types of Hornets experienced sharper and steeper drops in availability than the rest of the Department of the Navy's fleet. Because the Super Hornet is a newer aircraft, it has a higher availability rate, on average, than F/A-18C/Ds, which were introduced in the late 1980s.
- **Super Hornets Have Aged More Adversely Than Their Predecessors.** When compared with F/A-18C/Ds of the same age, the Super Hornet fleet has had lower availability rates. For example, Super Hornet availability at age 10 was about 18 percentage points lower than F/A-18C/D availability at age 10 and is comparable to F/A-18C/D availability at age 20. These findings suggest that age has had a more adverse effect on Super Hornets than it did on F/A-18C/Ds.
- **Flying Hours Cannot Explain Differing Availability.** Are Super Hornets becoming less available faster than their predecessors because they are flying more and thus subject to greater wear and tear? The data CBO analyzed do not support this hypothesis. Monthly flying hours of Super Hornets modestly exceeded those of F/A-18C/Ds only in the initial years of operation of both fleets. By age 10, however, Super Hornets were flying four fewer hours per month than 10-year-old F/A-18C/Ds flew.
- **Availability Rates of Super Hornets May Stabilize or Continue to Decline.** The experiences of the oldest Super Hornets suggest that their availability is likely to continue to decline as the fleet ages. A similar trend has been observed for many fighter and attack aircraft. But some fleets have had lengthy periods with stable availability rates. Because the Super Hornet is a relatively new aircraft, the Navy could take actions that might increase or stabilize the aircraft's availability rate, such as increasing funding for maintenance.

Contents

Notes

All years referred to in this document are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end.

In the figures depicting aircraft availability rates and flying hours by aircraft age, some of the curves do not start at zero because data are unavailable for the aircraft in their earliest years in the fleet.

On the cover: An F/A-18E Super Hornet undergoing maintenance at Naval Air Station Oceana in Virginia Beach, Virginia, May 2022. Photo taken by Aviation Structural Mechanic Chief Clifford Grambo, U.S. Navy.

Availability and Use of the F/A-18E/F Super Hornet Fighter Aircraft

Introduced in the mid-to-late 1990s, the Department of the Navy's (DoN's) F/A-18E/F Super Hornet is a multirole, fixed-wing aircraft capable of attacking other planes in the air or targets on the ground. Super Hornets are significantly larger and more capable than their predecessors, the F/A-18C/D Hornets introduced in the mid-1980s and still in use. (A modest number of F/A-18A/B Hornets, which were introduced in the early 1980s, also remain in operation.) The fleet of F/A-18s is currently the mainstay of naval shipborne aviation.

The Congressional Budget Office periodically analyzes two complementary aspects of aircraft fleet performance: what share of time aircraft could have been flown on training or operational missions in a given period (availability) and the hours of flight that actually occurred (use). Many factors affect aircraft use, including aircraft availability, military needs, and external elements such as weather and budgets. If DoN does not need to fly its aircraft as much, it may choose to accept a lower availability level so as to reduce its maintenance costs.

A January 2022 report by CBO found that the greater decline in availability rates of DoN aircraft relative to Air Force aircraft was driven by a steep decline in the availability of DoN's fighters and attack aircraft, particularly the F/A-18 C/D Hornets.[1] This report examines how Super Hornet availability rates and flying hours compare with those of older F/A-18s and other fighter and attack aircraft. Assessing availability and use in tandem can be informative because one measure can affect the other. An aircraft with a low availability rate may be unable to fly as much as DoN might wish. In the other direction, if a fleet's aircraft are flown more hours, they could end up in maintenance awaiting replacement parts and thus be unavailable for additional flight.

This report describes aircraft availability and use patterns but does not assess whether those patterns have been sufficient to meet DoN's operational needs. Aircraft availability rates are, at least to an extent, a choice that depends on the amount of funding provided for aircraft maintenance. By investing in, for instance, greater supplies of spare parts, a military service can increase aircraft availability rates. Likewise, a military service can choose whether and how much to fly an available aircraft, realizing that flying aircraft more increases costs, both for fuel and maintenance. The age-based figures in this report are best-fit curves, showing smoothed portrayals of the observed relationships between the ages of aircraft and their availability and usage rates.

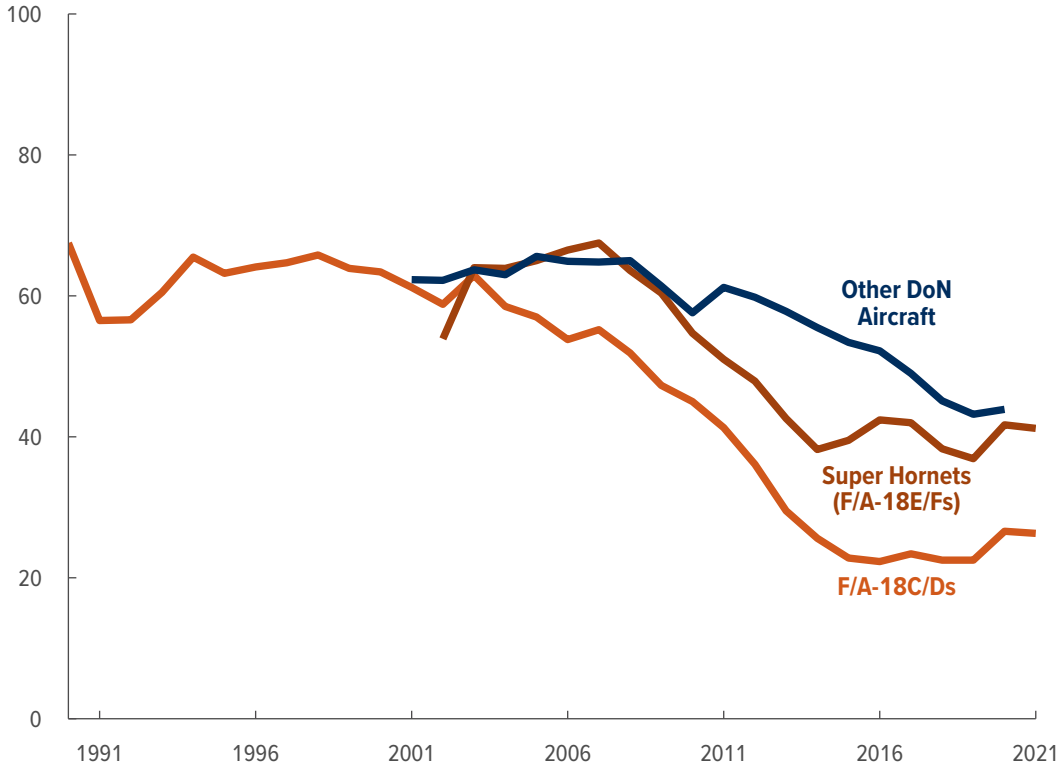
As with past reports, CBO measures fleet availability rates by dividing the number of hours that aircraft are both mission capable and in the possession of operational squadrons by the total number of aircraft hours for the entire fleet. (A mission-capable aircraft can perform at least one of its primary training or operational missions.) The measure that CBO uses typically produces lower availability rates than the measure used by the Department of Defense (DoD). That is because CBO's measure has a larger denominator that includes aircraft in a depot getting maintenance or in storage. In contrast, DoD divides the number of hours that aircraft are both mission capable and in the possession of operational squadrons by the total number of aircraft in the possession of those squadrons.[2]

Availability Rates by Fiscal Year Are Lower for Hornets Than for the Rest of the Navy's Fleet

Data from DoN's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE) database show that availability rates declined steeply for both Super Hornets and F/A-18C/D Hornets between the mid-2000s and the mid-2010s. But the F/A-18C/D Hornets are generally older. The oldest ones began flying in the mid-1980s. And the F/A-18C/Ds have been undergoing high flight hour (HFH) inspections—a series of inspections and repairs aimed at extending an aircraft's operating life beyond originally stipulated flying-hour limits. In a previous analysis, CBO noted that delays in completing HFH inspections for many Hornets have lowered availability rates.[3]

Availability Rates of Hornets and Other Department of the Navy Aircraft, by Year

Percent



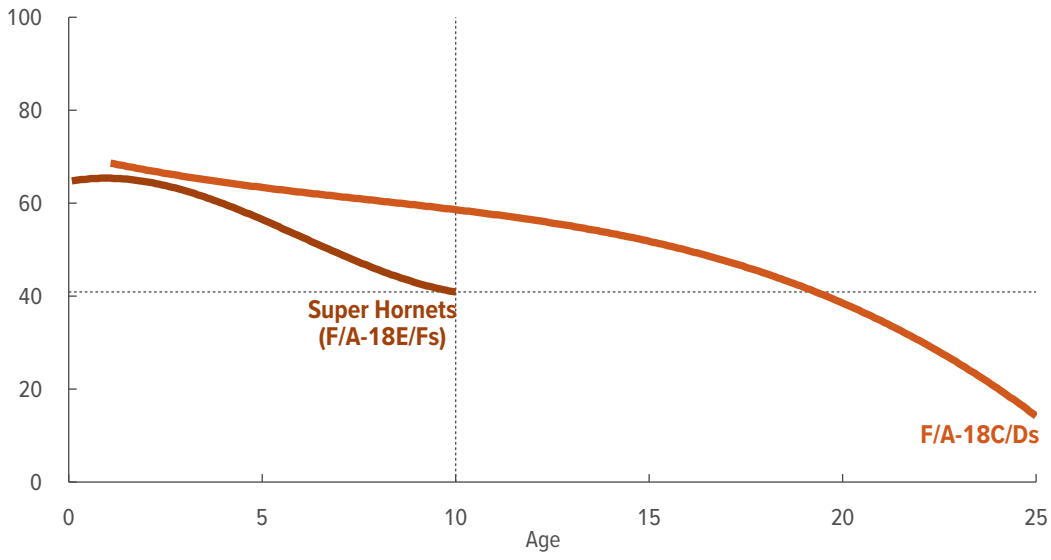
An aircraft's availability rate is the percentage of time it can be flown on training or operational missions. Availability rates of Super Hornets began to decline in the mid-2000s and dropped sharply in the early 2010s before leveling somewhat in recent years. At about 41 percent, they remain roughly 15 percentage points higher than availability rates of the older F/A-18C/D Hornets, which experienced a longer and steeper drop. Availability of the rest of DoN's fleet has also diminished, but that decline started later and has not been as steep.

Age-Based Availability Rates Have Declined Faster for Super Hornets Than for Their Predecessors

As a fleet of relatively newer aircraft, Super Hornets would be expected to have higher availability rates than their predecessor F/A-18C/Ds because Super Hornets, as a group, have had less time to accumulate flying hours and the associated wear and tear. To account for this, CBO adjusted the data to analyze availability as a function of each aircraft's age, rather than fiscal year. In CBO's analysis, the month an aircraft entered service is Month 0. Some of the curves do not start at age zero because CBO could not get data on availability of all aircraft in their earliest years in the fleet. And, although some Super Hornets have been flying since the mid-to-late 1990s, the figures depict availability rates up to age 10. CBO estimated average availability rates of Super Hornets up to age 10 because 70 percent of the fleet has reached that age. (Setting the threshold at 70 percent is a feature of the method CBO uses to compare aging patterns across multiple fleets. See Appendix A for more details about CBO's methods.)

Once aircraft age is considered, Super Hornets underperformed predecessor Hornets, with lower availability rates than the earlier generation of F/A-18C/Ds of the same age. Those differences are statistically significant. Responding to a query from CBO, DoN noted that many factors contributed to the differences in availability of the two types of aircraft, including the greater levels of galvanic corrosion arising from the greater use of composite metals in Super Hornets.[4]

Availability Rates of Hornets, by Age



The roughly 18 percentage-point gap between the availability rates of Super Hornets and those of F/A-18C/D Hornets at age 10 shows that Super Hornets are experiencing faster declines in availability than their predecessors. Super Hornet availability at age 10 is comparable to F/A-18C/D availability at age 20.

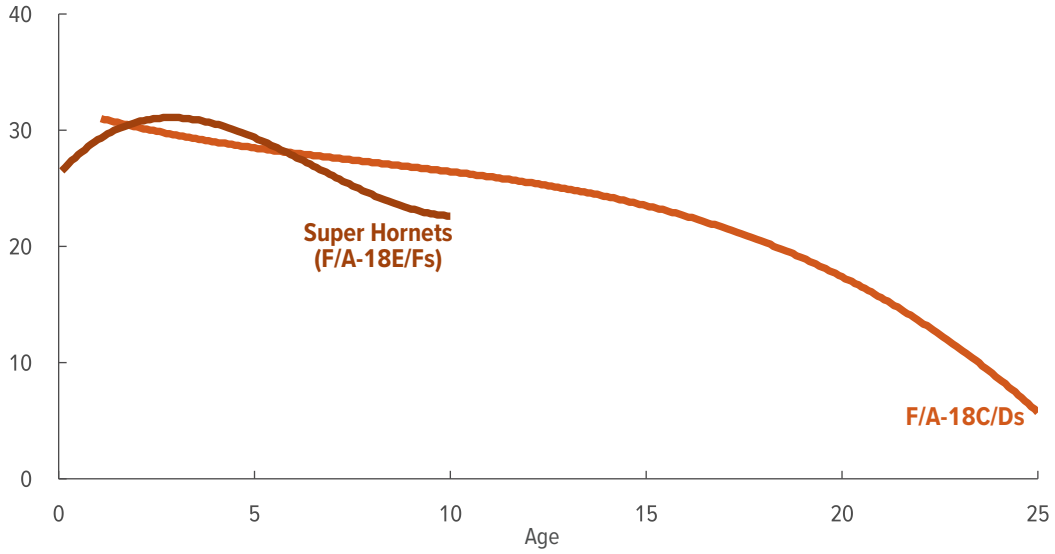
Age-Based Usage Rates Suggest Flying Hours Cannot Explain Differing Availability

One possible reason why availability rates of Super Hornets are much lower than availability rates of similarly aged F/A-18C/Ds is that Super Hornets experienced greater use early in their service lives. Flying hours per aircraft per month is one metric of aircraft use.

However, the declines in availability rates of Super Hornets relative to F/A-18C/Ds do not appear to be explained by additional hours in flight. This figure shows that monthly flying hours per aircraft of Super Hornets exceeded those of F/A-18C/Ds during just a few early years of operation, and only modestly. Since Super Hornets reached age 6, their flying hours have fallen below those of F/A-18C/Ds of the same age. As a result, typical cumulative lifetime flying hours for Super Hornets are below those of F/A-18C/Ds by age 7 and thereafter. CBO found that those differences in usage rates as a function of age are statistically significant.

Flying Hours of Hornets, by Age

Flying Hours per Aircraft per Month

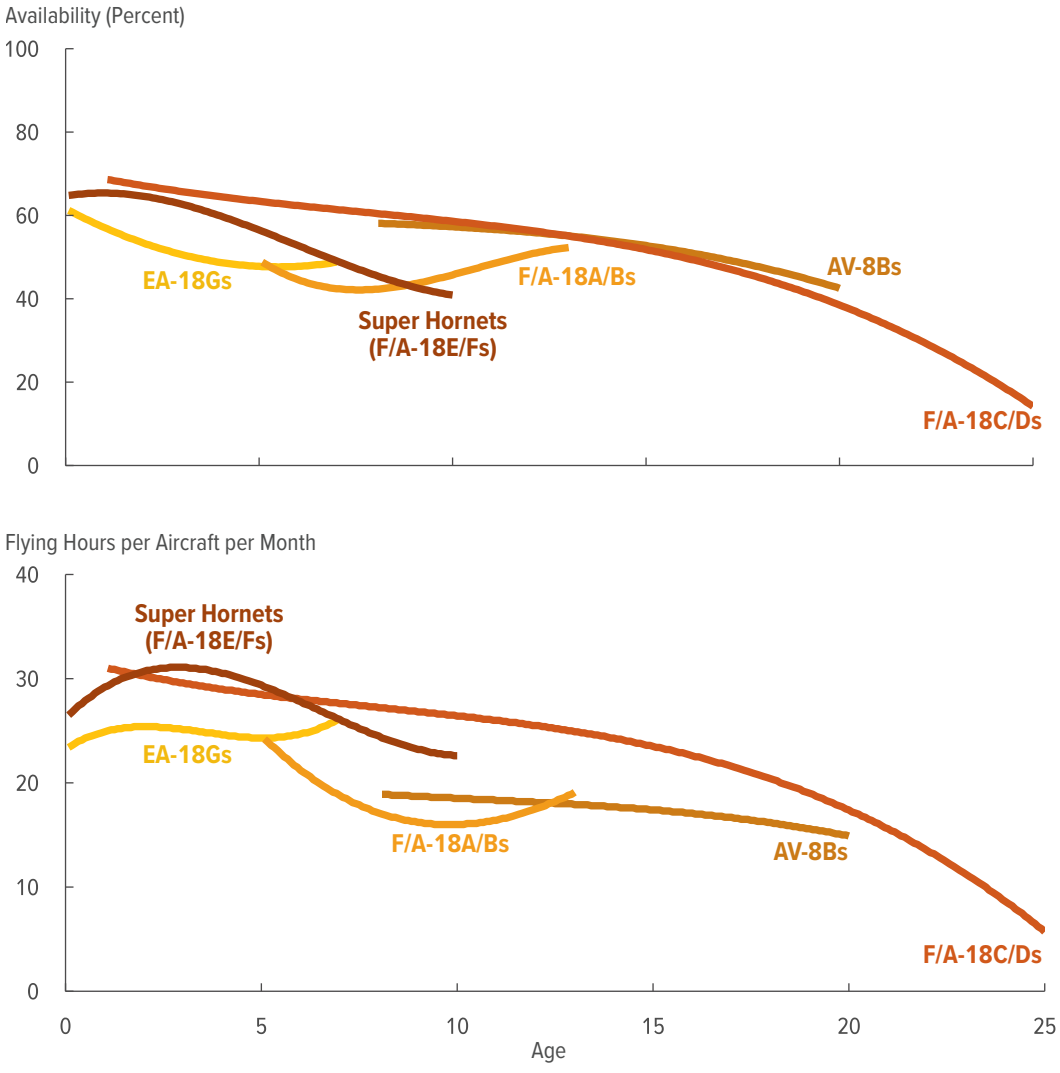


By age 10, Super Hornets are flying roughly four fewer hours per month than F/A-18C/D Hornets of the same age. Greater use cannot explain the steeper decline in availability of 10-year-old Super Hornets shown in the previous figure. In fact, 10-year-old Super Hornets are being flown as much as 16-year-old F/A-18C/Ds.

Super Hornets Have Had Greater Availability and Have Flown More Than Electronic Warfare EA-18G Growlers

CBO extended the comparison of Super Hornet availability and use to include other DoN fighter and attack aircraft: EA-18Gs (called Growlers), AV-8Bs (fixed-wing aircraft intended mainly to attack targets on the ground), and F/A-18A/Bs. Designed to jam an enemy's transmissions and attack an enemy's air defenses, EA-18Gs are similar to F/A-18E/F Super Hornets except with electronic warfare equipment installed. Given their added complexity, it is perhaps not surprising that EA-18Gs have had lower availability rates and have flown fewer hours per month than Super Hornets. Super Hornets have had lower availability rates, but have also been flown more, than AV-8Bs. Super Hornets have been flown more than F/A-18A/Bs were flown.

Availability Rates and Flying Hours of Super Hornets and Other Navy Fighter and Attack Aircraft, by Age

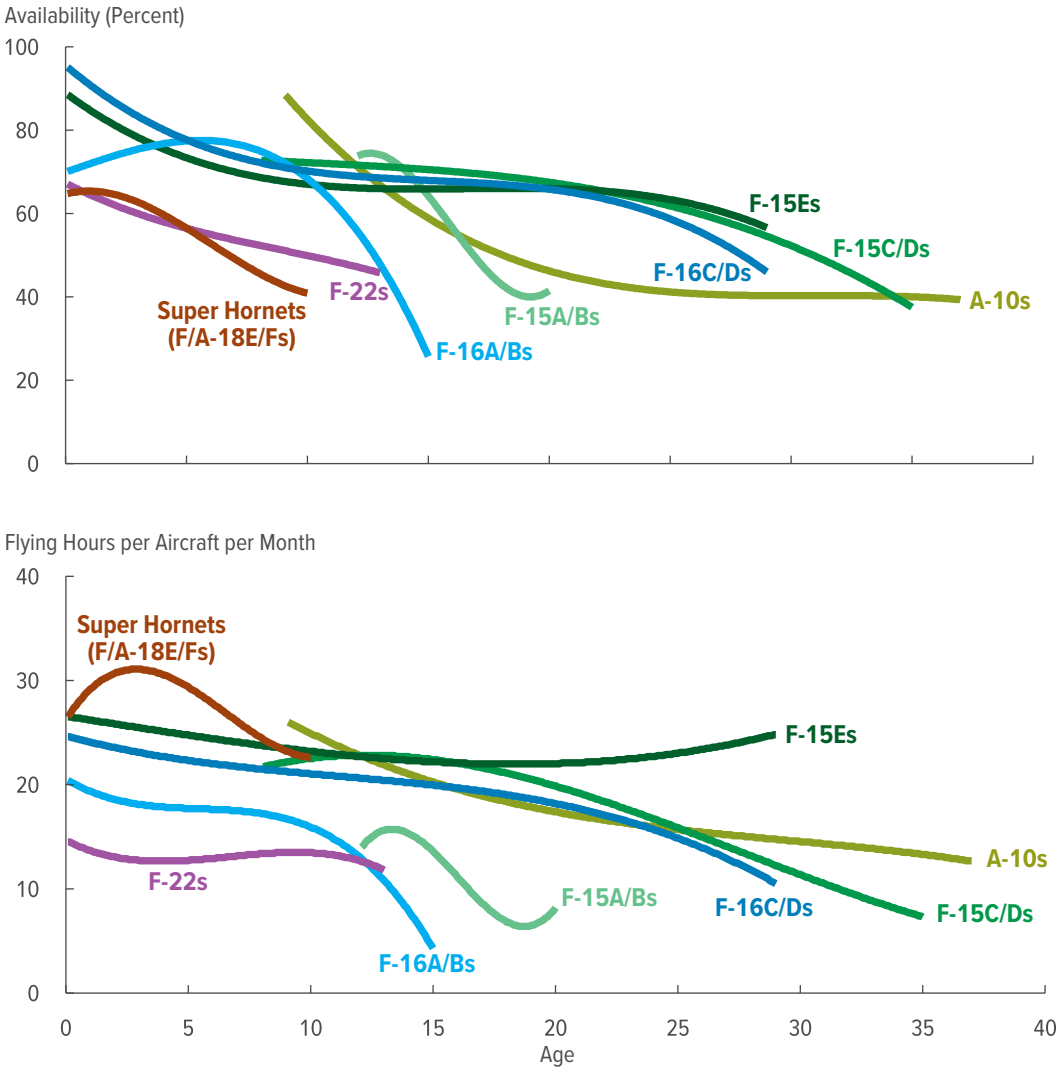


Super Hornets have had greater availability and have flown more than EA-18G Growlers. AV-8B availability has been very similar to that of F/A-18C/Ds. There was a midlife upturn in the availability of the F/A-18A/B Hornets—and a similar arc in their flying hours. Figures later in this report examine whether other aircraft have also seen such midlife reversals of declining availability.

Super Hornets Have Generally Had Lower Availability Rates Than Air Force Fighter and Attack Aircraft

CBO also compared Super Hornet availability rates and flying hours with those of various Air Force fighter and attack aircraft. The data used to calculate Air Force aircraft availability and flying hours come from that service's Reliability and Maintainability Information System (REMIS). Except for F-22s in their early years, Air Force fighter and attack aircraft have had higher availability rates than have Super Hornets. (F-22s had lower availability rates in their first 10 years than any other Air Force aircraft CBO analyzed for this comparison.) F-22s and other Air Force fighter and attack aircraft generally have flown fewer hours per month, on average, than Super Hornets, a finding that echoes previous CBO research showing that the Navy flies its fighter and attack aircraft more hours per month than the Air Force flies its aircraft.[5]

Availability Rates and Flying Hours of Super Hornets and Air Force Fighter and Attack Aircraft, by Age



Super Hornets have been generally less available for flying or training missions than have Air Force fighter and attack aircraft at the same age. However, Air Force aircraft do not take off from and land on aircraft carriers, so they are not subject to the related stresses and the saltwater corrosion that Super Hornets face. Super Hornets generally have flown more hours per aircraft per month than have Air Force fleets in the same age range.

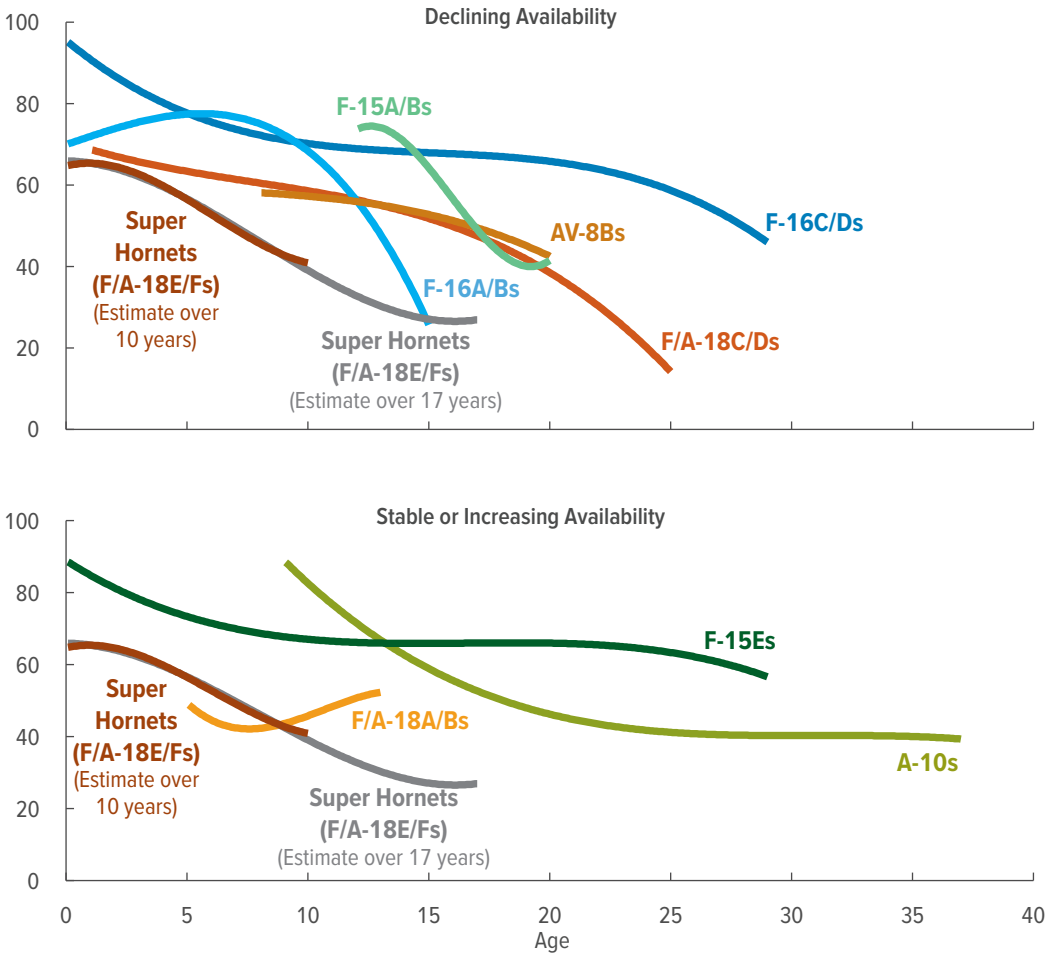
Differing Trajectories in Aircraft Availability Rates Over Time Suggest Uncertainty About the Future Availability of Super Hornets

To explore Super Hornets' potential future availability, CBO extended its analytical range to encompass older Super Hornets and juxtaposed that longer trend line with availability rates of other aircraft. In the preceding analyses, CBO minimized bias and the problems with small sample sizes by making sure that the number of aircraft in a sample at a given age was equal to at least 70 percent of the total number of aircraft observed. For Super Hornets, that corresponded to the first 10 years of operation.

To gain additional insight about the future of Super Hornets, CBO lowered its threshold to 30 percent of the total number of aircraft observed, allowing analysis of the first 17 years of Super Hornet operation. The 10-year and 17-year estimates of Super Hornet availability rates are shown in relation to trends in the availability of other fighter and attack aircraft fleets. Patterns differ widely, from sharp and sustained declines in availability to more gradual declines followed by lengthy periods with stable availability rates. Because the Super Hornets are relatively new, DoN might be able to take some actions to increase the aircraft's availability rate. For example, DoN could replace existing parts with new ones that have been redesigned for greater reliability or longevity, or it could devote more resources to routine maintenance (such as keeping on hand a more robust supply of spare parts).

Availability Rates of Super Hornets and Other Aircraft With Declining, Stable, or Increasing Availability

Percent



CBO estimated availability rates of Super Hornets up to age 17 by allowing the sample size to shrink to cover only 30 percent of the fleet. Extending the analysis range out to 17 years shows a continued decline in Super Hornet availability.

Although declining availability with age is observed across many fighter and attack aircraft, it is not a given. Some aircraft have had lengthy periods with stable (or even increasing) availability. Availability rates stabilized between ages 25 and 35 for A-10s and between ages 10 and 25 for F-15Es. They went up for the first Hornet variants, F/A-18A/Bs. Those data do not support a clear conclusion as to the Super Hornet's future availability.

Endnotes

1. In that report, CBO showed a pattern of long-term decline in the availability and use of DoN aircraft, in general, and fighter and attack aircraft, in particular. See Congressional Budget Office, *Availability and Use of Aircraft in the Air Force and Navy* (January 2022), www.cbo.gov/publication/57433.

2. For more details on how CBO's measure of availability rates compares with the Department of Defense's measure, see Congressional Budget Office, *Availability and Use of Aircraft in the Air Force and Navy* (January 2022), p. 2, www.cbo.gov/publication/57433.

3. See Congressional Budget Office, *Availability and Use of Aircraft in the Air Force and Navy* (January 2022), www.cbo.gov/publication/57433 and Congressional Budget Office, *The Depot-Level Maintenance of DoD's Combat Aircraft: Insights for the F-35* (February 2018), www.cbo.gov/publication/53543.

4. Galvanic corrosion "refers to corrosion damage induced when two dissimilar materials are coupled in a corrosive electrolyte. It occurs when two (or more) dissimilar metals are brought into electrical contact under water." See Association for Materials Protection and Performance, "Galvanic Corrosion" (accessed February 1, 2023), https://tinyurl.com/2s3ewjt2. Particularly in a maritime environment, it is common for water to be present inside of military aircraft. Greater use of composite materials implies that more dissimilar metals are in contact in a Super Hornet than in an F/A-18C/D.

5. See Congressional Budget Office, *Availability and Use of Aircraft in the Air Force and Navy* (January 2022), www.cbo.gov/publication/57433.

Appendix A: CBO's Methods

For this report, the Congressional Budget Office measured a fleet's availability rate and flying hours using data from the Air Force's Reliability and Maintainability Information System (REMIS) and the Department of the Navy's (DoN's) Decision Knowledge Programming for Logistics Analysis and Technical Evaluation (DECKPLATE). The two databases track the monthly performance of individual aircraft, including flying hours and the number of hours aircraft are "mission capable" (the term REMIS and DECKPLATE use for "available"). So, for example, the data show that the F/A-18E Super Hornet with bureau (tail) number 166913 flew 64 hours in October 2020 and had an availability rate of 78 percent (583 operator-possessed mission-capable hours during a 31-day, 744-hour month).

In addition to analyzing availability and use by calendar month, CBO analyzed availability and use by month of age of the aircraft. The following examples illustrate how CBO transformed the aircraft data to undertake such analysis. The Super Hornet with bureau number 166913 entered service on October 13, 2010, according to DoN. So, October 2010 was its "Month 0," in CBO's vernacular. October 2020 was therefore that aircraft's Month 120, the last month of its 10th year of service in the Navy. In contrast, the Super Hornet with bureau number 166914 entered service on July 20, 2010. For Super Hornet 166914, October 2020 was its Month 123, the third month of its 11th year of service.

CBO obtained service-entry dates for most aircraft directly from DoN (which provided ancillary data to CBO) and the Air Force (through REMIS). For some newer aircraft, CBO used the first month observed in DECKPLATE or REMIS as Month 0. There were a few aircraft for which CBO had to infer entry dates by looking at the entry dates of the same type of aircraft with adjacent tail numbers.

The data CBO analyzed were truncated, in two respects. First, CBO did not always observe the earliest months of aircraft operation. The DECKPLATE data CBO analyzed start in September 1989 (for most F/A-18s) or January 2000 (for AV-8Bs). Comprehensive tabulation of fighter and attack aircraft data in REMIS commenced in the late 1980s. If an aircraft (for instance, an older F/A-18C/D) entered service before the earliest month for which CBO obtained data, CBO observed only the later months of its service. For example, the F/A-18C with bureau number 163436 entered service on March 18, 1988. CBO observed its flying hours and availability starting in September 1989, that aircraft's Month 18. CBO observed the entire service lives to date of most of the Navy's F/A-18E/F Super Hornets and EA-18Gs and the Air Force's F-22 stealth fighter aircraft because the DECKPLATE and REMIS data CBO analyzed start before the initial operation of those fleets.

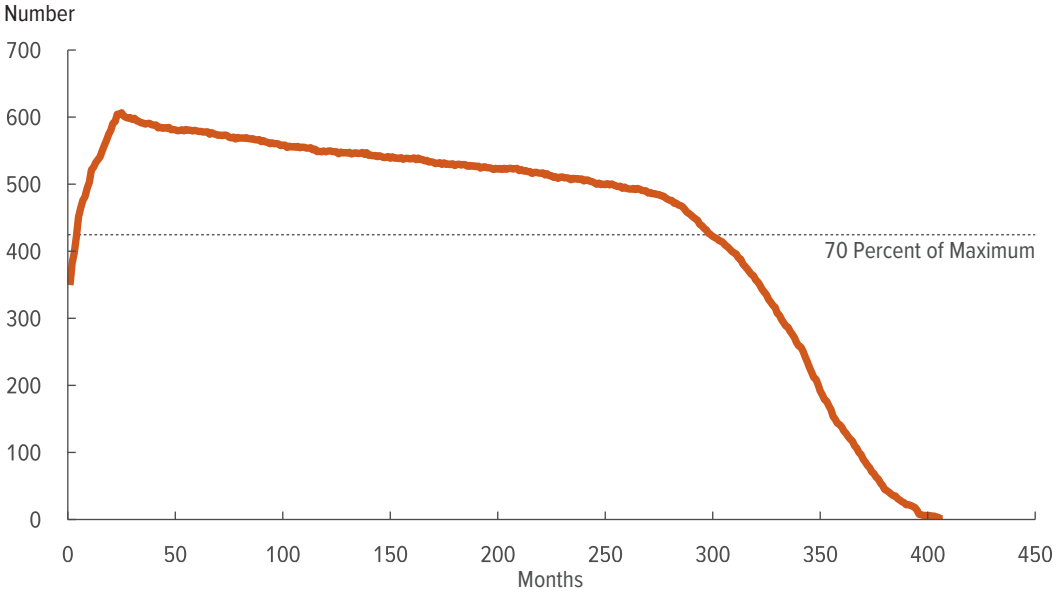
Second, CBO did not observe the months of aircraft operation that occurred after the data were collected. CBO observed aircraft still in service through the last month the agency analyzed data (September 2021 for Navy aircraft, May 2022 for Air Force aircraft). So, for instance, CBO observed Super Hornet 166913 through its Month 131 (September 2021) and Super Hornet 166914 through its Month 134 (again, September 2021).

For its analysis of aging, CBO used a subset of its data to ensure a large enough sample size to reliably estimate aircraft fleet availability rates and flying hours per aircraft. For an illustration of the procedure, see Figure A-1. The figure shows the number of F/A-18C/Ds CBO observed as a function of month number. CBO observes Month 1 for 349 F/A-18C/Ds. The number of F/A-18C/Ds in CBO's data peaks in Month 25 (the first month of the third year of operation) at 607 aircraft.

After the highest point—at Month 25—the number of observed F/A-18C/Ds drifts downward. There is, however, a more precipitous decline in the number of aircraft CBO observed between Month 300 (422 F/A-18C/Ds) and Month 360 (138 F/A-18C/Ds). As of the last month in the data CBO analyzed, September 2021, a considerable number of F/A-18C/Ds were at least 25 years old (so CBO observed their Month 300). A smaller number were at least 30 years old (so CBO observed their Month 360). The F/A-18C/Ds that were at least 30 years old

Figure A-1.

Number of Observed F/A-18C/Ds and the Subset Used for Calculating Availability and Use, by Age



CBO focused on availability rates and flying hours of F/A-18C/Ds between their 2nd and 25th years of operation (Months 13–300) because that period produced a sample size covering at least 70 percent of the maximum number of aircraft observed.

Data source: Congressional Budget Office, using data from the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system. See www.cbo.gov/publication/58687#data.

as of September 2021 are the oldest F/A-18C/Ds; their outcomes may not correspond to what will happen to newer F/A-18C/Ds when they reach age 30. Depending on the aircraft's maintenance program, the oldest F/A-18C/Ds may perform very differently than the newer F/A-18C/Ds perform when they reach that older age.

To reduce the amount of bias and problems with small sample sizes, CBO generally restricted its estimates to year-age blocks in which at least 70 percent of the maximum number of aircraft was observed. In the case of the F/A-18C/Ds, that range was Year 2 through Year 25—years in which at least 425 aircraft (70 percent of 607 aircraft) were observed. Note that because the analysis looks at whole years, CBO selects Year 2 as the beginning of the range because, for every month in that year, at least 70 percent of the total aircraft were observed. Year 1 was not selected because Months 1 through 4 each had fewer than 425 aircraft. Likewise, Year 25 marks the end of the range because every month in that year (Months 289–300) had at least 425 aircraft, whereas not every month in Year 26 had that number of aircraft in the sample.

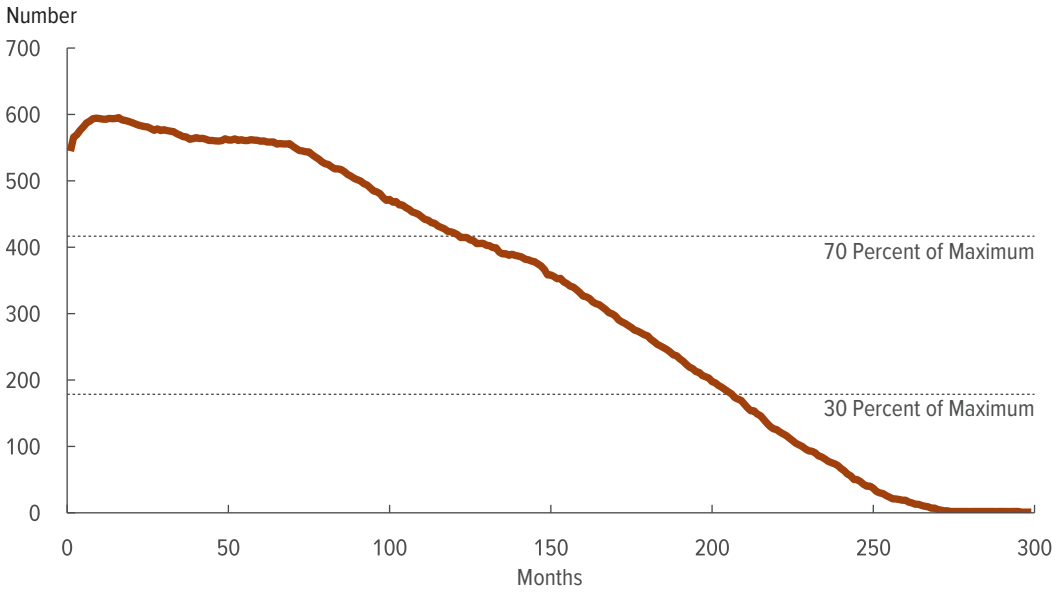
Because F/A-18E/F Super Hornets entered service in the mid-to-late 1990s, the DECKPLATE data CBO received from DoN basically cover the entirety of the aircraft's operation through September 2021. The oldest Super Hornet, an F/A-18F with bureau number 165170, was placed in service in October 1996. Therefore, it achieved its 299th month of service in September 2021, one month short of 25 years. (Unlike for most Super Hornets, the DECKPLATE data CBO analyzed for Super Hornet 165170 start in January 2000.) Most of the fleet is considerably newer than Super Hornet 165170: 70 percent of the fleet has served for at least 10 years (120 months), and 30 percent of the fleet has served for at least 17 years (204 months). For the distribution of the number of Super Hornet age-months observed in the data, see Figure A-2. CBO used the first 10 years of Super Hornet operation to perform its standard analysis (encompassing 70 percent of the maximum number of aircraft observed) with an extended analysis out to 17 years of operation (encompassing 30 percent of the maximum number of aircraft observed).

The age-based figures in this report are best-fit curves, showing smoothed portrayals of the observed relationships between the ages of aircraft and their availability and usage rates. For example, using data from the first 10 years of Super Hornet operation, CBO estimated the relationship between aircraft age and aircraft availability using the following equation:

$$Availability_i = \beta_0 + \beta_1 \times Month_i + \beta_2 \times Month_i^2 + \beta_3 \times Month_i^3 + \varepsilon_i ,$$

Figure A-2.

Number of Observed Super Hornets (F/A-18E/Fs) and the Subset Used for Estimates of Availability and Use, by Age



For most of the figures in this report, CBO estimated availability rates and flying hours for Super Hornets up to Month 120 (corresponding to 70 percent of the aircraft observed at the peak). For the figures exploring potential future trends in availability and use, CBO also produced estimates out to 204 months by allowing the sample size to cover 30 percent of the maximum number of observations.

Data source: Congressional Budget Office, using data from the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system. See www.cbo.gov/publication/58687#data.

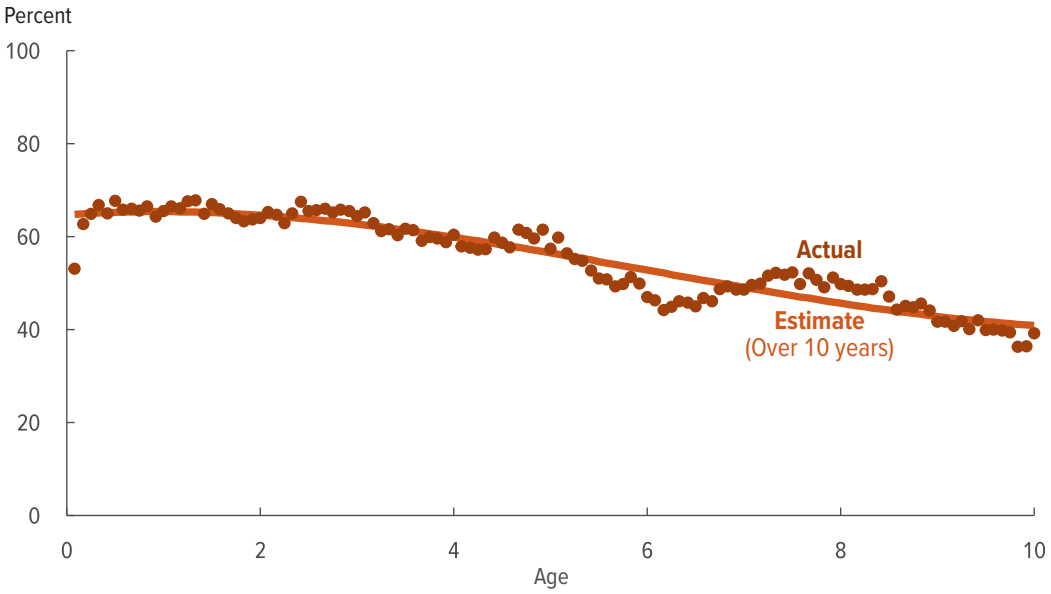
where *i* corresponds to the month number (1 through 120). CBO chose this flexible functional form (including squared and cubed terms) because it allowed the agency to estimate whether peak availability was in the first month or a later month. See Figure A-3, which plots the Super Hornet availability rates, both actual and estimated, over their first 10 years of operation (Months 1 through 120).

The estimated values are intended to graphically describe availability in the observed months, allowing straightforward comparison with similarly estimated curves for other aircraft. They are not intended to predict future availability levels outside of the fitted range.

CBO used the same functional form with flying hours per month as the dependent variable, applying this estimation technique for all types of aircraft discussed in this report. CBO used a Chow test to assess whether the difference between patterns of Super Hornets and patterns of other aircraft are statistically significant; CBO found them to be so in each case. So, for example, the observed availability pattern of the Super Hornet fleet was statistically significantly different from that of the fleet of F/A-18C/Ds.

Figure A-3.

Actual and Estimated Super Hornet Availability Rates, by Age



CBO estimated a best-fit curve characterizing Super Hornet availability during the aircraft's first 10 years of operation.

Data source: Congressional Budget Office, using data from the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system. See www.cbo.gov/publication/58687#data.

Appendix B: Data Sources for Figures

Availability Rates of Hornets and Other Department of the Navy Aircraft, by Year

Congressional Budget Office, using data from the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system.

Availability Rates of Hornets, by Age

Congressional Budget Office, using data from the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system.

Flying Hours of Hornets, by Age

Congressional Budget Office, using data from the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system.

Availability Rates and Flying Hours of Super Hornets and Other Navy Fighter and Attack Aircraft, by Age

Congressional Budget Office, using data from the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system.

Availability Rates and Flying Hours of Super Hornets and Air Force Fighter and Attack Aircraft, by Age

Congressional Budget Office, using data from the Air Force's Reliability and Maintainability Information System and the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system.

Availability Rates of Super Hornets and Other Aircraft With Declining, Stable, or Increasing Availability

Congressional Budget Office, using data from the Air Force's Reliability and Maintainability Information System and the Department of the Navy's Decision Knowledge Programming for Logistics Analysis and Technical Evaluation system.

About This Document

This report was prepared at the request of the Chairman and Ranking Member of the Subcommittee on Readiness of the House Armed Services Committee in the 117th Congress. In keeping with the Congressional Budget Office's mandate to provide objective, impartial analysis, the report makes no recommendations.

Edward G. Keating, Kathryn McGinnis, R. Derek Trunkey, Shannon Smith (formerly of CBO), and Hanna Willwerth (formerly of CBO) prepared the report with guidance from David Mosher. David Arthur, Ron Gecan, and Christina Hawley Anthony provided assistance. F. Matthew Woodward fact-checked the report. S. Craig Goodwyn of CNA and Thomas Light of the RAND Corporation commented on an earlier draft. The assistance of external reviewers implies no responsibility for the final product; that responsibility rests solely with CBO.

Mark Doms, Jeffrey Kling, and Robert Sunshine reviewed the report. Lora Engdahl edited it, with assistance from Christine Browne, and R. L. Rebach created the graphics and prepared the text for publication. The report is available at www.cbo.gov/publication/58687.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.

Phillip L. Swagel
Director
February 2023