Worldwide C-17 Availability to Support 82nd Airborne Operations from Fort Bragg/Pope Field

Shane Tierney, Anthony D. Rosello, Christopher G. Pernin
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This report explores C-17 availability and determines how quickly these aircraft and their aircrews can reach Fort Bragg/Pope Field, where the 82nd Airborne Division operates, from the many locations they are deployed to worldwide. Historical data on C-17 availability and individual aircraft locations over a full year were analyzed to determine how quickly C-17s could be ready to depart Fort Bragg/Pope Field airlifting the Global Response Force.

RESEARCH QUESTIONS

• How much of the C-17 fleet is fully mission capable at any time?
• How quickly can C-17 aircraft reach Fort Bragg/Pope Field from the many locations they are deployed to worldwide?
• How quickly can C-17 aircraft be made ready to depart Fort Bragg/Pope Field, airlifting the Global Response Force?

KEY FINDINGS

On Average, Around 50 Percent of the C-17 Fleet, or 104 Aircraft, Are Fully Mission Capable at Any Time

• This number dropped to as low as 68 aircraft and rose as high as 126 aircraft in the year of data examined.
• On average, another 25 percent of the fleet is partially mission capable, but it is unclear whether these aircraft could serve the Global Response Force.

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All Fully Mission Capable Aircraft Could Be Ready to Redeploy Within 87 Hours

• Smaller groups of aircraft could be available sooner.
• On average, 1–2 aircraft could be made available within 12 hours.
• About 35 aircraft could be made available within 24 hours.

RECOMMENDATIONS

• The 82nd Airborne Division/Global Response Force (GRF) should take into consideration realistic expectations of aircraft availability when planning their operations. This includes maintenance availability, time to reach Ft. Bragg/Pope Field and rest the crew, and likelihood of diverting from in-progress missions.
• If more C-17s are kept near or at Ft. Bragg/Pope Field for their usual activities, it can increase the number of aircraft available to the 82nd Airborne Division/GRF on short notice.
• It is important to understand in which cases waivers for shortened pilot rest times will be granted, as this can make aircraft available sooner.
• If some partially mission capable aircraft could be used safely, doing so could significantly increase the number of aircraft available and reduce the time to have a substantial number prepared for 82nd Airborne Division/GRF operations.
• Real-world throughput of aircraft at Ft. Bragg/Pope Field could be an issue and should be investigated, along with the possibility of queuing aircraft at nearby locations to combat this problem.
• Effort should be taken to understand whether comparable aircraft, such as the C-5, could be used in lieu of or in combination with the C-17 fleet and whether this would increase immediate aircraft availability.