Concerns have risen regarding the risk of U.S. military personnel engaging in far-right violent extremism. Approximately 12 percent of those involved in the attack on the U.S. Capitol were either U.S. military veterans, members of the National Guard and active duty U.S. military personnel. Furthermore, recent analyses suggest that the percentage of terrorist attacks and plots perpetrated by active-duty or reserve service members went from zero in 2018 to more than 6 percent in 2020. Given these factors, the Pentagon has initiated a set of actions intended to address the risk of violent extremism in the force to include implementing force-wide stand-down, implanting tougher screenings of new recruits and establishing an anti-extremism working group which recently issued a report on potential policy responses. The purpose of this paper is to review the academic and policy literature addressing the history of violent extremism in the U.S. military, explore several case studies of U.S. military personnel who engaged in violent extremist attacks or planning and highlight potential policy responses that the Pentagon can undertake to further address the risk of extremism in the force.