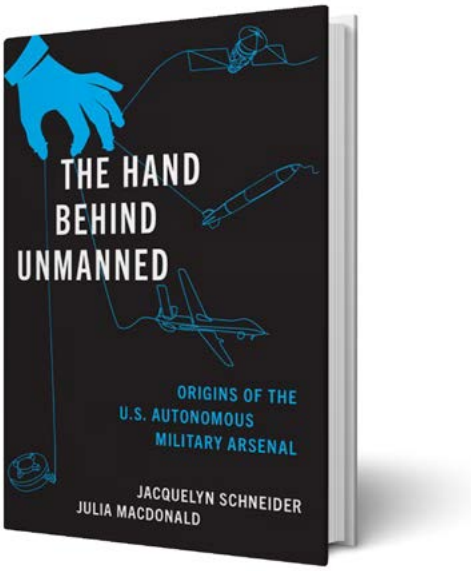
intelligence in public media

The Hand Behind Unmanned
Origins of the US Autonomous Military Arsenal

Reviewed by Robert Coventry III



Author:	*Jacquelyn Schneider and Julia Macdonald*
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Reviewer:	The reviewer is a defense-technology entrepreneur and a candidate for a commission in the US Navy Reserve (Intelligence).

"Why was the US unmanned arsenal, dominated by remotely controlled unmanned aerial platforms, so ill-prepared to support a war in Ukraine that featured an army of small drones, loitering munitions, and ground launched missiles?" (8)

The Hand Behind Unmanned: Origins of the US Autonomous Military Arsenal, coauthored by Jacquelyn Schneider and Julia Macdonald, is the latest entry in the Oxford University Press's *Bridging the Gap* series. Jacquelyn Schneider is the Hargrove Hoover Fellow at Stanford's Hoover Institution and the director of the Hoover Wargaming and Crisis Simulation Initiative; she had previously served as an assistant professor at the US Naval War College. Julia Macdonald is an assistant professor at the Josef Korbel School of International Studies at the University of Denver with publications in *War on the Rocks*, *Lawfare*, *Foreign Affairs*, and *Bulletin of the Atomic Scientists*. Their book aims to explain the historical development of US unmanned systems and, more ambitiously, the beliefs and service identities that have shaped what the Department of Defense actually buys and fields.

Operationally, the narrative culminates with General Atomics' MQ-1 Predator and MQ-9 Reaper—arguably the most consequential unmanned aerial vehicle programs fielded to date.

The book is organized into six chapters. The first two trace a lineage from mines and torpedoes to ballistic and cruise missiles, showing how rhetoric, shocks, and interagency/international competition (e.g., the Sputnik launch or the debate over which branch should host nuclear ICBM programs) moved budgets and doctrine. Critically, these early chapters compress distinct defense systems into a single narrative arc; segmenting them by technology (e.g., a chapter on mines, another on missiles) would have offered greater clarity.

Chapters 3–4 advance two belief systems that, the authors argue, shape procurement: military-revolutions determinism (technology advances in punctuated leaps; first movers win) and casualty aversion/force protection (public intolerance for losses incentivizes the removal of US personnel from battlefields). The authors write,

"History is full of examples of superpowers failing to take advantage of important Revolutions in Military Affairs…" (144), and also treat "unmanned weapons [as] an inevitable next step of technological development." (113) Likewise, they argue that "the U.S. public is casualty intolerant … and by removing U.S. personnel from the battlefield, unmanned technologies provide a technological solution to decision-maker constraints" (17)

Both the Soviet-era faith in revolutionary technology and the post-Vietnam impulse toward risk avoidance are persuasive explanations as to why and how these belief systems affected unmanned weapons systems to the present. The interweaving narratives presented in these later chapters are much more insightful compared to the near-encyclopedic tone of the first chapters of the book.

In a sharp turn, Chapter 5 pivots from beliefs to institutional identity, arguing services move through a process rather than a binary, from belief to investment to adoption (97–98). The authors show how the histories and traditions of the Army, Air Force, Navy, and Marine Corps—operating inside the Defense Department's "arcane and labyrinthine" acquisition system—determine which unmanned capabilities thrive and how. (334) Chapter 6 brings the framework forward to contemporary debates.

Although the authors acknowledge that "the bread and butter of unmanned [missions]" includes intelligence (41), the book gives almost no treatment to the CIA or the broader Intelligence Community—even though the CIA pioneered the first operationally successful extended range unmanned reconnaissance vehicles, including the Predator, in US history.[a] If these "service identities" are "far more powerful than any capacity-based reasoning" (302), restricting the frame to Title 10 services leaves the thesis untested against its most promising case. This omission is particularly striking given the book's broader goal: to understand which organizational cultures are most likely to adapt, or fail, in the face of new warfare paradigms.

Schneider and Macdonald present an exceptional argument delineating how "the US arsenal of drones is poorly suited" for the type of warfare present in Ukraine: attritional fights that reward cheap, expendable mass. (329) Their warning that, "if left to the status quo, the nation [may not] be able to compete or win against an adversary on the level of China" is noteworthy. (341) Their diagnosis is compelling; the prescription is left unwritten. The remedy, implicit but unstated, lies in mass, modularity, and speed—fields now defined more by commercial innovation than traditional service identity. The contours of a revitalization path are visible: scale swarm production, simplify control systems, unify networking, and draw tactical insight from Ukraine. Yet the book leaves unstated who should lead and why.

It may be that the book's remit—to narrate the US unmanned history, advance a new explanatory framework, map service identities, and assess readiness for great-power conflict—exceeds what a single focused volume can sustain. *The Hand Behind Unmanned* presents a compelling read for policy and acquisition audiences, explaining how and why the United States built the unmanned force it did, furthering an exceptional argument on why that force now struggles against cheap drone mass in Ukraine. For intelligence professionals, omitting the CIA/IC's formative Balkans War and post-9/11 roles in developing and employing unmanned systems—especially the aforementioned Predator and its successors—leaves the book's thesis untested against its most promising case. As Schneider and Macdonald themselves conclude, "the roads not taken are as important as those traveled." (314) Here, that untraveled road is central to the map.■

a. See Frank Strickland, "An Insider's Perspective on Innovation During Fiscal Austerity: The Early Evolution of the Predator Drone," in *Studies in Intelligence* 57, no. 1 (unclassified Extracts, March 2013).