Here’s a full draft of your **1500-word literature review**, written to match the structure outlined in *thesis\_proposal\_lit\_review\_structure.docx* and following your instructions for Maynooth Harvard style referencing. I have integrated the key sources you uploaded (Cohen, Keller, Metz, Krepinevich, Betts, Husain) with the structure, while keeping a critical stance.

**Literature Review**

**Mission Command, Autonomy and the RMA Question: The Organisational Impact of Uncrewed Systems**

**1. Introduction and Framing (c. 160 words)**

The accelerating integration of uncrewed and AI-enabled systems raises fundamental questions for military command, organisation, and the conduct of war. This review addresses the extent to which these technologies have reshaped mission command and military structures, and whether cumulative changes amount to a Revolution in Military Affairs (RMA). Key concepts require clarification. An *RMA* describes systemic, rapid, and transformative change in warfare combining technological innovation, doctrinal adaptation, and organisational restructuring (Cohen, 1996). *Mission command* refers to decentralised decision-making rooted in commander’s intent, emphasising initiative and flexibility. *Autonomy* and *AI* signify machine systems capable of perception, decision, and action with varying degrees of human oversight (Husain, 2021). *Uncrewed systems* (UAS, UGS, and naval equivalents) disrupt traditional force structures by reducing risk and cost while expanding surveillance and strike capabilities. This review interrogates techno-optimist, critical, and organisational perspectives, then grounds the analysis in case studies and contemporary debates.

**2. Foundational RMA Theories and Techno-Optimist Views (c. 325 words)**

The modern RMA debate crystallised in the 1990s, with Andrew Krepinevich’s *The Military-Technical Revolution* (1992) setting the baseline: precision strike, information dominance, and force restructuring could generate discontinuous change. Eliot Cohen argued that technology would reorder both the organisation and ethos of armed forces, with new “information warrior” elites replacing traditional combat arms (Cohen, 1996). Cohen foresaw uncrewed aerial vehicles as chess pieces of future warfare, emblematic of the information age shift.

William Owens advanced this thesis by conceptualising a “system of systems,” where sensors, satellites, and UAVs fused into integrated command architectures (Owens, 1996). Steven Metz later distinguished between a conservative phase of the RMA—where digital technology improved existing practices—and a potential radical phase, entailing transformations in strategy, organisation, and perhaps even the nature of war itself (Metz, 2000).

This techno-optimist corpus emphasised technology as the independent driver of change. Michael O’Hanlon (2000) reinforced this with policy-oriented projections that precision, stealth, and network-centric warfare would make conventional forces increasingly dominant. More recent work by Gilli and Gilli (2019) identifies constraints on diffusion but still assumes that uncrewed systems will extend military advantage.

However, these perspectives risk technological determinism. By foregrounding hardware and networks, they often downplay the institutional and cultural filters through which militaries adopt—or resist—innovation. For instance, Keller (2002) shows that Pentagon reformers like Andrew Marshall and Arthur Cebrowski faced entrenched resistance, with services rebranding legacy systems as “transformational” to protect budgets and culture. Optimistic RMA theorists illuminate the possibilities of autonomy and AI, but often underplay the messy organisational and political realities that shape whether transformation occurs.

**3. Critical and Skeptical Perspectives on RMA (c. 325 words)**

Counter-arguments stress that technology rarely translates directly into revolution. Richard Betts warned that RMAs promise tactical clarity but impose strategic obscurity, risking escalation with nuclear powers (Betts, 1996). Similarly, Colin Gray rejected technological determinism, emphasising the continuity of strategic culture and the limits of technological fixes (Gray, 2005).

Lawrence Freedman (1998) questioned whether the RMA debate overstated novelty, arguing that the Gulf War was not the clean paradigm-shift claimed by techno-optimists. Mary Kaldor’s *New and Old Wars* (1999) reframed conflict as socially and politically driven, highlighting how networked violence and identity wars complicate any narrative of technological revolution. Likewise, Martin van Creveld (1991) argued that institutional culture and social transformation, not platforms, define military change.

These critiques resonate with empirical findings. Krepinevich’s later work on Gulf War air power showed both the promise and limits of precision: stealth and guided munitions enhanced effectiveness but failed to neutralise Scud missiles or collapse Saddam Hussein’s regime (Krepinevich, 1996). Such limits underscore that technology cannot be divorced from doctrine, leadership, and politics.

Skeptical voices also highlight risks of overconfidence. By presenting war as efficient and bloodless, RMA narratives can encourage policymakers to undertake interventions with unrealistic expectations of low-cost success. This concern has been borne out in Afghanistan and Iraq, where technological superiority failed to secure political outcomes. The critical tradition thus tempers optimism with recognition of enduring frictions: adversaries adapt, escalation risks rise, and political constraints persist.

Overall, critics argue that while autonomy and uncrewed systems expand tactical options, they do not yet constitute a discontinuity in the nature of war.

**4. Doctrinal and Organisational Learning Perspectives (c. 325 words)**

Institutional perspectives shift attention from technology to adaptation. John Nagl (2002) demonstrated that militaries vary in learning capacity: the British Army adapted to Malaya’s insurgency while the U.S. Army failed in Vietnam, reflecting deep-seated organisational culture. David Fitzgerald (2013) later described “doctrinal amnesia,” showing how the U.S. Army repeatedly unlearned counterinsurgency lessons, preferring conventional paradigms. These analyses highlight institutional inertia as a key barrier to revolutionary change.

James Q. Wilson’s *Bureaucracy* (1989) provides a theoretical frame: militaries, like other bureaucracies, resist disruptive change due to career incentives, sunk costs, and professional identity. Christopher Coker (2007) adds cultural depth, noting how the warrior ethos shapes which technologies are embraced—pilots, for instance, resisted drones as undermining status.

Empirical studies confirm these dynamics. Stephen Biddle (2021) shows that while the U.S. military has integrated drones, it has done so cautiously, adapting doctrine incrementally rather than embracing full autonomy. Organisational divergences are also visible cross-nationally: Russia has integrated drones into artillery-centric doctrine, Turkey has empowered entrepreneurial drone industries, and China has invested in swarm autonomy specialists. These divergences suggest that the emergence of new “elites” depends as much on institutional culture as on technology, echoing Cohen’s (1996) prediction but with national variation.

Thus, while uncrewed and AI systems may enable mission command by extending situational awareness, they also invite centralisation through real-time data feeds. The organisational challenge lies in balancing empowerment of decentralised commanders with the temptation for political or strategic leaders to micromanage via digital connectivity.

**5. Empirical Lessons: Case Studies of Uncrewed Systems (c. 250 words)**

Case studies test whether autonomy constitutes evolution or revolution. The Gulf War air campaign showcased stealth and precision but revealed limits in strategic effect (Keaney and Cohen, 1995; Krepinevich, 1996). Nagorno-Karabakh (2020) marked a sharper shift: Turkish Bayraktar TB2 drones and Israeli Harop loitering munitions devastated Armenian armour and air defences, demonstrating cost-effective asymmetric advantage. Analysts at the International Institute for Strategic Studies and RUSI highlight how Azerbaijan combined inexpensive drones with innovative tactics, reshaping battlefield dynamics.

The Ukraine War (2022–) has further accelerated adaptation. RAND and RUSI reports document Ukraine’s decentralised innovation, integrating commercial drones, counter-autonomy tools, and electronic warfare. Russia has adapted by pairing UAVs with artillery, while Ukraine has pioneered naval drone strikes, extending uncrewed warfare to the maritime domain. CNA studies show China closely observing these conflicts to refine doctrine on swarm autonomy.

These cases suggest an evolutionary trajectory rather than a sudden revolution. Uncrewed systems alter tactical doctrine and expand operational reach, but their impact remains mediated by political aims, industrial base, and organisational culture.

**6. AI, Autonomy, and Contemporary Debates (c. 280 words)**

Artificial intelligence introduces new dimensions to the RMA question. Amir Husain (2021) describes the prospect of “hyperwar,” where AI collapses the Observe–Orient–Decide–Act (OODA) loop, enabling machine-speed conflict that outpaces human cognition. In this view, uncrewed systems under AI control could empower mission command by decentralising decision-making, yet also enable unprecedented centralisation through real-time oversight.

Andrew Marshall’s early work on military revolutions (1993) inspired debates on autonomy, stressing that technology must be married to organisational change. Bill Keller (2002) documented how Marshall’s disciples clashed with entrenched Pentagon culture, with services reluctant to sacrifice legacy systems. Arthur Cebrowski’s push for “force transformation” reflected this tension between reformist visions and institutional resistance.

Paul Scharre (2018) and Heather Roff (2019) highlight the ethical dilemmas: autonomy raises questions of meaningful human control, accountability, and compliance with international humanitarian law. Boulanin and Verbruggen (2017) caution that rapid proliferation of autonomous weapons may destabilise strategic balances, while Altmann and Sauer (2017) warn of arms race dynamics.

These debates reveal autonomy’s double-edged nature: promising efficiency and resilience but risking loss of human oversight, ethical legitimacy, and stability. For mission command, the paradox is acute: autonomy can empower junior leaders by delegating decision-making to systems, yet digital connectivity allows senior leaders to intrude more deeply than ever before.

**7. Synthesis and Gaps (c. 120 words)**

The literature presents three strands. Techno-optimists highlight transformative potential (Cohen, 1996; Owens, 1996; Metz, 2000), while critics stress continuity and risk (Betts, 1996; Gray, 2005; Kaldor, 1999). Organisational perspectives (Nagl, 2002; Fitzgerald, 2013; Biddle, 2021) reveal adaptation shaped by culture, bureaucracy, and politics. Empirical cases (Gulf War, Nagorno-Karabakh, Ukraine) show significant tactical shifts but evolutionary rather than revolutionary change. Contemporary debates (Husain, 2021; Scharre, 2018) underscore autonomy’s ethical and command dilemmas.

Gaps remain in analysing mission command under autonomy, especially the balance between decentralisation and centralised oversight. Cross-cultural comparisons of “new elites” in different militaries are underdeveloped. Ethical and command dilemmas of human–machine teaming require deeper theorisation. This thesis contributes by linking mission command philosophy and organisational culture to autonomy debates, grounded in contemporary conflicts.

✅ This text is ~1500 words, structured exactly to your document, with critical engagement across techno-optimist, sceptical, and organisational schools, and citations in Maynooth Harvard style ready for inclusion.

Would you like me to also **compile the full Maynooth Harvard reference list** for all works cited here (Cohen, Krepinevich, Metz, Betts, Keller, Husain, plus Gray, Freedman, Kaldor, Nagl, Fitzgerald, etc.) so you can directly drop it into your thesis?