

# Optimizing coalition air warfare: the emergence and ethical dilemmas of Red Card Holder Teams

Authors:

Katja Lindskov Jacobsen, University of Copenhagen

Rune Saugmann, Tampere University

## 1. Between national mandates and coalition air warfare

When various states decide to join a collaborative military air intervention led, for example, by the US or NATO, each contributing state not only agrees to the overall aim of the operation, but also join in with their own, national mandates. Such mandates specify both what aspects of the operation their military contribution is mandated to partake in (e.g. flying only in Iraq and not in Syria), as well as under what conditions their military contribution may engage a given target (what is an acceptable level of civilian casualty, what constitutes a legitimate target, how is self-defence interpreted, etc.). That contributing states all have different national mandates has the consequence that inside a coalition, like for example the on-going Operation Inherent Resolve (OIR) in Iraq and Syria, we find a number of military contributions from a variety of states, all of whom are likely to have different caveats regarding what aspects of the mission and how, in practice, their military contribution may contribute to the specific military intervention.

It is in the context of such complex interventions that the role of the Red Card Holder (RCH) Team has emerged. The main function of this Team is to ensure that national mandates, caveats, and interpretations are adhered to whenever a pilot from their country is tasked by coalition Headquarters to engage a target. The Red Card Holder function has, in other words, become central to the link between national political mandates and international collaborative intervention practices.

More broadly, the development of this function must also be seen in relation to broader debates about technology and autonomy in contemporary coalition warfare, as current practice will likely inform future practice in collaborative air interventions. We suggest, thus, to look at the practices related to technological warfare rather than at specific technologies, such as drones. First, whilst discussions of drones and autonomy are indeed important vis-à-vis the *future* of air warfare and regulations thereof, it is at least as

important to discuss and illuminate *current* practices that regulate air warfare, whether this is conducted by manned, unmanned or autonomous systems. As examined in this article, drones form part of a broader set of technologies (also comprised of precision guided weapons, intelligence gathering technologies, communication technologies, etc.) all of which forms part of the context in which the function of the RCH Team must be understood. Second, and following from this, we suggest that the role of drones and other new technologies can favourably be examined through the notion of human-machine interfaces and reconfigurations (Suchman, 2017). One can see RCH Teams as an example of a 'human' component in such an interface and analyse its place in the reconfiguration of pilots, aircraft, weapons, command and control functions, and intelligence technologies, which is what we do here. Whether the practice of formalising legal review in a specialized institution (RCH) will enable RCH-approved strikes to be carried out autonomously, or whether attempts will be made to have computers perform RCH functions, is difficult to say, but what we can say is that it is difficult to un-invent a function as the Red Card Holder once it is institutionalised. As such, the article is not merely about RCH Teams, but also about the role of humans in relation to new technologies of war. Moreover, focusing on RCH Teams, as an emerging standard in coalition air warfare, also allows the analysis offered in this article to move between the level of the RCH Team and the level of the broader coalition context as we discuss the role of new technology and of new functions in optimizing collaborative warfare.

Methodologically, our article is based on a group interview session with a Danish RCH Team, which lasted for a full day (February, 2018). Our three interviewees represented the three main components of Red Card Holder teams, and all had experience from deployment in recent collaborative air wars. The interviewees were: an experienced Red Card Holder, a legal advisor, and an intelligence specialist. Supplementing this interview, the authors have had follow-up conversations with all three Team members, attended a RCH briefing, and engaged in dialogue with other experienced Danish pilots. Accordingly, the analysis of the RCH function presented in this article will reflect Red Card Holder practice in the Danish context, and Danish military professionals' experience of collaboration and of other nations' practices. Thus, it may not reflect the role of RCH Teams in all situations, and Red Card Holder practice in other western countries may exhibit important differences that we have not been able to assess.

## **2. The RCH Team**

### **The Red Card Holder function: who, where, what**

RCH Teams have developed during the last two decades of collaborative air interventions undertaken either by NATO or by groups of like-minded states. In such coalition contexts, different fighter jets are

tasked from a central Air Operations Centre to strike (or, in military parlance, 'engage') specific targets that have been developed to achieve the objectives of the mission (Ekelhof, 2018; interviews). Yet, prior to a fighter jet from a specific nation striking a target, the national RCH Team must first approve this. Indeed, when a state contributes a fighter jet, the RCH Team has now become part of the package together with mechanics and other support personnel. It is this RCH function that we will now describe in more detail, drawing on interviews with Danish Red Card Holder team members. Our aim is to show that this and other 'on-the-ground' functions are keys to understanding how international law – and importantly national interpretations thereof – function in practice and influence the conduct of collaborative warfare.

Whenever a nation decides to contribute fighter jets to collaborative warfare, it also sends one or more RCH Teams. This Team is posted to coalition Headquarters, and whenever 'its' fighters are in the air, the Team follows the mission from the 'OPS floor' (from where current operations are run), with RCH Teams from all the contributing nations whose aircraft are in the air. Thus far, it is only seen during OIR that RCHs had a dedicated floor inside the Combined Air Operations Centre (CAOC) (interview). Thus, RCH Teams are part of the CAOC where other decision makers are also present.

The aim of the RCH Team is both to ensure that mandates, national caveats, etc. are respected in practice and to make the 'assets' contributed by a state usable in 'near real time' in the network of contributions that makes up the collaborative intervention (interview).

A RCH Team commonly consist of three components: military legal advisor(s)<sup>1</sup>, intelligence officer(s), and, crucially, the RCH him/herself (an experienced military officer with pilot-background, the leader of the Team and the person responsible for making decisions, based on inputs from legal advisors and intelligence officers, combined with his/her military expertise). In addition, a Unit Representative serves as liaison between the RCH Team and the actual fighter jet, whose target the Team is tasked to assess. Indeed, the key function of the RCH Team is to ensure that international law and national mandates, specifying the conditions under which fighter jets from this nation can strike a target, are adhered to. If a nation for example decides (in the form of a mandate) that during Inherent Resolve its pilots are only allowed to strike targets in Iraq (i.e. not in Syria), then it is the responsibility of the RCH Team to ensure that this caveat is adhered to when they receive a request from the mission HQ to strike a specific target. Mandates are much more complicated than simply ensuring that geographical caveats are adhered to and the main function of the RCH Team is to guarantee that all specifications in the national mandate are adhered to whenever a target is 'engaged'. As such, the Team serves an important legal function. In a certain sense, the Team is the link between the collaborative 'coalition' context – with numerous contributing states – and the sovereign nation state with its national interpretation of international law and its nationally formulated mandates and

caveats that serve as the very basis for the fighter jet contribution and express why as well as where and how the nation is at war. Put differently, it is through the RCH Team that the contributing nation strives to ensure that its military power is used in a manner consistent not only with the overall aims of the (in this case, U.S.-led) mission, but – crucially – with the mandate defined at national policy level<sup>2</sup>.

Importantly, it is not the RCH Team that identifies what targets to strike and when – for an explanation of how this is done, see the literature on the targeting cycle (Ekelhof, 2018; Roorda, 2015). Rather, the RCH Team approves or disapproves targets in mainly two rather different processes, though the RCH essentially needs and bases his/her decisions on similar information in both processes. One is the ‘dynamic’ strike situation (NATO, 2016:3) when ‘their’ national pilot (probably already in the air) is asked to strike a person or position, which has been positively identified (PID) as a military target – e.g. hostile forces attacking forces from the collaborating states. When they receive a call from the Joint Strike Centre asking if the pilot can strike, the RCH Team decides – on the basis of the account given (over the phone and other means of communication, e.g. chat)<sup>3</sup> of the scenario combined with different intelligence sources, legal restrictions, and military expertise – whether to allow the pilot to ‘engage’ the target or whether to give a ‘Red Card’. This message is then delivered to the pilot in the fighter jet. Sometimes the RCH Team is able to visually witness the consequences of their ‘Green Card’, when the ‘encounter’ is displayed on the screen on the OPS floor. This, however, is not always the case. The other process is known as ‘pre-planned’ (interview) or ‘deliberate’ targeting (NATO, 2016:2) (cf. Roorda 2015:158) and occurs when targets are known and an aerial attack against them is planned in advance. The steps in the dynamic targeting cycle are thus similar to those in the deliberate targeting cycle, the important difference being the time pressure which means that for pre-planned targeting, it is easier to see the aspect of RCH practice that Danish team members describe as a ‘Green Card’: the Team monitors and advises the target development process from a national perspective, thus participating in deliberations over how to efficiently and effectively engage the day’s ‘target pack’ to meet the desired objectives (whether that be striking a person or group of persons, destroying a facility, making it unusable, etc.). Despite the time difference for pre-planned and dynamic targets, however, the Command and Control function undertaken by the RCH Team in assisting the coalition to plan and optimise its various national contributions, while taking into account their different caveats, is always present. This includes questions such as which of the national contributions have the suitable weapons to strike a specific target and adequate defence systems for the dangers posed in doing so, down to mundane issues like maintenance, fuel, and availability of aircraft. Here, the RCH Teams are deeply engaged in a collaborative planning function, in addition to ensuring that national caveats and national interpretations of international law are complied with.

Though the RCH Team and the function it serves in the context of coalition warfare is now common practice, its development is, however, best understood in relation to two related developments. The first of these concerns technological advances – e.g. related to precision weapons, collaboration, and battlefield surveillance – technologies that are now key to the practice of collaborative air warfare, which the RCH Team is part of. The second development concerns the national mandates for collaborative air warfare and related expressions of national sovereignty – national interpretations of international law, thresholds for acceptable collateral damage and/or casualties, interpretation of international law, etc.

#### **a) History: technological developments and advances**

In an important sense, the development of the RCH function is closely related to the development of precision weapons and novel intelligence/monitoring-technologies (e.g. drone footage). In conjunction, these two types of technology aim to facilitate more precise targeting.

When NATO air forces intervened in the later stages of the war in the former Yugoslavia, a sort of RCH function was part of the collaboration. However, it was not yet defined as such and was undertaken by what was called the Senior National Representative to the coalition forces. Importantly, the munitions used by Danish forces were not laser or GPS guided, and thus less precise than those used in later collaborative air wars. This air war featured the mistaken bombing of the Chinese Embassy in Belgrade<sup>4</sup>, which spurred widespread debate over the targeting process.

From a Danish perspective, the intervention in Afghanistan – initiated in the early 2000's – was characterised by the use of new precision-guided munitions combined with a range of different national caveats by contributing nations<sup>5</sup>. In that context, RCH Teams began to serve an important function in satisfying contributing nations' domestic political constituencies as well as the operational aim of making optimal use of the varied/variously constrained (cf. national caveats) military contributions. The Danish forces contributed a RCH Team (at that time, a senior national representative with a legal advisor) and the Team employed its power to veto a designated target as appropriate/inappropriate for Danish forces to strike (interview). This function has since been developed during various collaborative air operations. Notably, *Odyssey Dawn* – the U.S. led mission in Libya in 2011, with a particularly strong focus on fighter jet contributions – was highlighted during our interviews as important to the maturing of the RCH function, as Danish forces deployed 923 bombs that were all pre-approved by RCH Teams. Today, as already mentioned, the RCH Team has become a de facto standard for any offensive contribution. It is now expected that all fighter jet contributions in an offensive role come with a RCH Team: “everyone knows why this team arrived” and all the national RCH Teams that come with each fighter jet contribution work on the

“OPS Floor” (interview). Thus, also the intervention in Iraq and Syria, *Inherent Resolve*, had a RCH Team following fighter aircraft and authorizing their use of force.

The advent of laser- and GPS-guided munitions is a technological development that is integral to the RCH practice. The involvement of a RCH is irrespective of whether the air to ground weapons are guided or unguided (interview). Unguided bombs require the same military, legal and intelligence considerations prior to approval. The difference when it comes to precision-guided missiles is that they enable more options, also in relation to the Law of Armed Conflict.

At a more general level, the pre-planning of precise strikes both enables various national levels of e.g. tolerance of collateral damage, and can work in tandem with international law to make certain strikes legal for some nations possessing precise weaponry, whilst not for other nations possessing less precise weaponry, since for example the proportionality between military advantage and the risk posed for civilians would preclude striking an urban target with weaponry that can only destroy that target by also destroying its surroundings.

It is also important to note that over the last two decades, the world has witnessed a series of military air interventions and a proliferation of asymmetric violent conflicts. In the wake of these developments, targeting discourses and practices have come under scrutiny by a number of scholars (e.g. Perugini and Gordon, 2015; Agius 2017; Suchman 2017). We are interested in the practices developed during these interventions: what happens when states engage in repeated collaborative air interventions and develop institutions such as RCH Teams to control targeting following specific, nationally defined, circumstances. It is from this perspective that we have set out to interrogate the practice of the RCH Teams approving the targeting. In doing so we, for example, follow Merel Ekelhof and Laura Dickinson.

#### **b) Legal aspects: national sovereignty and international collaboration**

The second development that we wish to highlight here is the development of what we call expressions of national sovereignty – national mandates for the use of force<sup>6</sup>, national interpretations of the laws of armed conflict, national military manuals, national guidelines on risk, or national caveats from mission objectives. Whilst some of these rules – e.g. rules of engagement and national military manuals – are important to all military activity and thus relatively unconnected to the practice of collaborative warfare, others like the caveats to overall mission aims follow directly from collaboration practice.

As it becomes possible to strike a target with greater precision, as described above, it also becomes possible on the policy level to define in a more detailed manner under what circumstances and against

what kinds of threats national politicians are willing to accept that their nation's military power be deployed, including how international rules governing war and armed conflict are to be interpreted.

Caveats are thus in part enabled by the technological possibilities offered by these munitions and the technological possibilities for reliably assessing who did what and to which consequence. Thus, RCH Team members express their function as part of channelling national will – assessing whether the nation state is *allowed* to strike a target (following national interpretations of international law and national caveats to the overall mission), *wants* to strike a target (cf. the objective for participating in the coalition, as expressed in the parliamentary decision, and as part of the mandate) and *can* strike a target (has the means to do so). The RCH function thus relies on an apparatus of distinction, differentiation, targeting and monitoring that permits nations to define precise limits for its warring practices and assess whether they are followed. These apparatuses of distinction and differentiation (Perugini & Gordon, 2015) can in tandem with Red Card Holder practice lead to situations in which, for example, Danish aircraft are not allowed to strike a target because they do not at that specific moment possess the most precise weaponry in their arsenal (thus compromising principles of distinction and/or minimizing civilian harm), but where a partner nation employing identical weaponry *is* allowed to strike (as they are doing the best distinction and harm minimization that they can possibly do).

RCH Teams are thus important as a vector for the expression of national sovereignty in armed conflicts fought in a coalition setting with the use of offensive air power, in the form of ever-more precise mandates and caveats. With improvements in precision weaponry it, for example, becomes increasingly more unacceptable, also at policy levels, to destroy entire buildings in cases where it is possible, for instance, to hit only those parts of a building, which are being used for military rather than civilian purposes.

### **3. The coalition context and dilemmas of the RCH function: compliance vs. optimization**

Not only does the RCH Team ensure that national mandates are adhered to. Whilst this is the main function of the Team seen from a national perspective, another key function of the RCH Teams becomes visible if we shift our focus to the coalition context. Indeed, when considering the picture of numerous contributing states with a plethora of different national caveats, another important function of the RCH Teams is to help CAOC effectively *coordinate* all these contributions. If there were no RCH Teams to speed up the process of deciding whether X or Y fighter jet could strike a particular target to the desired 'near-real-time' level, it would be far more cumbersome for the lead-nation to find a process for making the most of the many fighter jet contributions with as many different national caveats. As noted by the RCH Team that we interviewed, their function can be understood as a tool that makes it possible to take into account all contributing nations' caveats. As understood by this RCH Team, a crucial function of their role is to help

coordinate all the different contributions into an effective military intervention, thus making the most of each contribution in light of various national caveats that define what types of targets the pilot can engage, under what conditions, and where. In short, it is not only about 'Red Cards' – when a request is not in line with national caveats – it is also “very much about Green Cards. We don't participant in this intervention to say 'No' every time we are asked to engage a target” (interview). Thus, from a coalition perspective, another key function of the RCH Team is that they are crucial in effectively employing and making optimal use of different national air asset contributions to international interventions – like the one in Syria and Iraq.

Considering these two perspectives – the national and the coalition perspective – an important tension can be discerned. On the one hand, contributing nations have different interpretations and mandates, and the job of the RCH Team is to ensure that these national caveats are adhered to. On the other hand, the lead-nation seeks to make the most of all contributions, optimizing the ultimate effect of the overall intervention. Here the RCH function is also of crucial importance. Yet, a dilemma emerges insofar as there are differences between the contributor and the overall interpretation of legitimate means and ends – e.g. in how key terms such as self-defense, or international law more broadly are understood. Like the paradox outlined in the introduction: do these differences mean that no one can carry out attacks prohibited by one collaborating state, or do they merely mean that collaborators will do what a given contributor isn't allowed to? If the latter is, as we have argued, often the case, what are the then effects of the RCH Team insofar as they enable such 'optimization'? Put differently, in principle, the RCH Team adds an important layer of national approval, compliance and 'human control' to the conduct of contemporary air warfare, with its manifold technological components. Yet, as we have shown in this article, the effects of this function cannot be fully appreciated without an analysis of how it works in practice, notably in relation to broader coalition contexts, like OIR, and the quest for collaborative optimization.

## Bios

**Katja Lindskov Jacobsen** is a senior researcher at the University of Copenhagen in the Department of Political Science's Centre for Military Studies. Jacobsen's research looks at various types of intervention, from capacity building to coalition warfare, often with a specific interest in the role of new technology. Her research has been published in *Security Dialogue*, *International Affairs*, *Global Governance*, *Journal of Global Security Studies* among others.

**Rune Saugmann** is an Academy of Finland post-doctoral researcher at Tampere University, and Docent at the University of Helsinki. His interdisciplinary visual security research is published in e.g. *Security Dialogue*, *EJIR*, *Journalism Practice*, and numerous IR and media collections. Rune is co-editor of *Visual Security Studies* (2018). More at [saugmann.tumblr.com](http://saugmann.tumblr.com)

## Bibliography

Agius, C., 2017. "Ordering without bordering: drones, the unbordering of late modern warfare and ontological insecurity." *Postcolonial Studies* 20, 370–386. <https://doi.org/10.1080/13688790.2017.1378084>

Dickinson, L.A., 2010. "Military Lawyers on the Battlefield: An Empirical Account of International Law Compliance." *American Journal of International Law* 104, 1–28. <https://doi.org/10.5305/amerjintelaw.104.1.0001>

Ekelhof, M.A.C., 2018. "Lifting the Fog of Targeting: "Autonomous Weapons" and Human Control through the Lens of Military Targeting." *Naval War College Review*, Volume 71, Number 3, Summer 2018

NATO STANDARDIZATION OFFICE, 2016. NATO STANDARD AJP-3.9 ALLIED JOINT DOCTRINE FOR JOINT TARGETING.

Perugini, N., Gordon, N., 2015. *The Human Right to Dominate*. Oxford University Press.

Roorda, M., 2015. NATO's Targeting Process: Ensuring Human Control Over (and Lawful Use of) 'Autonomous' Weapons. In A. P. Williams, & P. D. Scharre (Eds.), *Autonomous systems: issues for defence policymakers* (pp. 152-168). Norfolk, VA: NATO HQ SACT.

Suchman, L., Follis, K., Weber, J., 2017. "Tracking and Targeting: Sociotechnologies of (In)security." *Science, Technology, & Human Values* 42, 983–1002. <https://doi.org/10.1177/0162243917731524>

## Endnotes

---

We are grateful to all three Team members for taking their time to do a full-day interview session and engage in detailed follow-up conversations

<sup>1</sup> For an analysis focusing specifically on the role of military lawyers, see Dickinson 2010

<sup>2</sup> This also applies in NATO operations (e.g. ISAF, Libya, Kosovo) and with other lead nations (e.g. France in Mali)

<sup>3</sup> Several nations use chat, which is also the primary means of communication in NATO OPS (interview).

<sup>4</sup> The Chinese Embassy mistakenly identified as something different and therefore targeted.

<sup>5</sup> Whilst new for Denmark, other nations had been using PGMs for many years (going back to the Vietnam War).

<sup>6</sup> Our review of Danish mandates for participating in collaborative air interventions since 1995 shows an increasing demand for specific caveats and opt-outs. Space precludes us from detailing this here