

Britain's National Audit Office and Parliamentary Defence Committees: Sources for Evaluating Royal Air Force (RAF) Program Performance

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Abstract: Public scrutiny of Royal Air Force (RAF) programs regularly occurs through media reports, variegated scholarly analysis, Ministry of Defence (MOD) documentation, and parliamentary debates. This article argues that those studying contemporary and recent historical RAF programs must also examine and analyze National Audit Office (NAO), parliamentary select committee oversight, and All Party Parliamentary Group (APPG) activity and documentation, to gain enhanced and credible understanding of RAF successes and failures.

These information resources are freely available in the form of reports, statistical

analysis, transcripts of parliamentary committee evidence sessions, visual analytics and, in some cases, video webcasts and audio podcasts. This article examines how NAO, parliamentary committees, and the All Party Parliamentary Group on Drones (APPGD) have examined recent RAF programs and advocates that serious students of RAF and other UK military programs and policies use these information resources to enhance individual and global understanding of the RAF.

Introduction-The proliferation of publicly accessible digital information resources offers students, scholars, and highly motivated citizens the opportunity learn significant details about governmental program policy performance. This is even true for military service and agency performance in the United Kingdom and many other democratically governed countries. This information, though of varying quality and reliability, is available through traditional and social media, multiple scholarly resources, Ministry of Defence (MOD) documentation, and parliamentary debates. This article emphasizes that information on Royal Air Force (RAF) programs is also available from the National Audit Office (NAO), parliamentary committees, and All Party Parliamentary Groups (APPGs). It urges that those seriously interested in getting substantive and diverse analysis into RAF program performance must consult information resources and data produced by these

entities to gain a more complete analysis of the successes and failures experienced by RAF programs.

Government auditing agencies such as the U.S. Government Accountability Office (GAO) and Britain's National Audit Office (NAO) play important roles evaluating the performance of governmental programs and agencies. NAO was established by Parliament's National Audit Act in 1983. Its purpose was seeking to enhance parliamentary control and supervision of governmental spending by appointing a Comptroller and Auditor General, establishing a Public Accounts Commission, and a National Audit Office. These entities were designed to promote economy, efficiency, and effectiveness in governmental spending. This organic statute, however, did not allow these entities to "question the merits of the policy objectives of any department, authority, or body in respect of which an examination is carried out."¹

Its subsequent history has seen it issue numerous reports documenting the management performance of government programs from the RAF and other agencies. These include Value for Money (VFM) studies which audit government programs and are used as a basis for evidence given by senior public servants when presenting evidence to parliamentary committees.

These reports stress the accumulation of evidence stressing coherence, consensus, and correspondence; gather evidence from participating stakeholder agencies and affected parties; focus primarily on financial instead of managerial matters; and can impact agency subsequent agency policy formulation and performance although agencies are not legally bound by NAO findings and recommendations. Unlike, the U.S. Congress and the GAO, Parliament is unable to use NAO to pursue potential legal proceedings against a British government agency since it lacks the legal powers to initiate such proceedings.²

Varying perspectives exist on the role and effectiveness of British parliamentary committees in scrutinizing the effectiveness of British government programs. Parliament ostensibly holds the power of the purse over government expenditure, although many analyses of parliamentary scrutiny maintain that a majority government will get its way with spending and policymaking priorities though this preeminence of power is likely to be modified if there is a minority government vulnerable to no confidence or supply votes. Some evidence appears to suggest that the unelected House of Lords wields more scrutiny and influence than the House of Commons. Select committees within the House of Commons were established in 1979 and

conduct executive oversight examining public spending, policy, and administration, and investigative work “shadowing” government departments. They play no formal part in the legislative process which is done by public bill committees. Commons Select Committees have at least 11 members, the power to appoint specialist advisors, and issue publicly accessible reports on the parliamentary website with the government having 60 days to reply to the recommendations contained in these reports. Select Committee members have the opportunity to obtain significant policy expertise and positively influence departmental policymaking performance. Conversely, Select Committees have no power to require the government to act on their recommendations. One analysis of House of Commons Select Committees contends their influence involves:

- Direct government acceptance of committee recommendations
- Influencing policy debate
- Spotlighting issues and altering policy priorities
- Brokering in public policy disputes
- Providing expert evidence
- Holding government and outside bodies accountable
- Exposure

- Generating fear (anticipated reactions).³

National Audit Office-NAO reports on the Ministry of Defence (MOD) examine topics as varied as major equipment and program support, affordability, providing a suitable defense estate, and defense workforce shortages. These occur within a policy environment where £35.3 billion pounds were spent on defense during 2016-2017; £178 billion is planned for defense equipment between 2016-2026; and defense spending is to represent 2% of Gross Domestic Product (GDP). This spending impacts 197,040 military personnel and 56,680 civilian staff with the latter expected to experience a 30% reduction by 2020. Key spending programs during the immediate future include £31 billion for building four nuclear deterrent submarines with a £10 billion in additional contingency funding and the December 2020 acquisition of Carrier Strike Capability along with spending to acquire 138 F-35 Lightning Aircraft factoring in this funding.⁴

NAO's website www.nao.org/ provides access to reports from 1998-present and includes significant documentation on RAF programs. A 14 September 2000 report addressed training new pilots. This report noted that all armed services needed 250 pilots each year between 1994-1999 with that total expected to increase to 290 in 2001-2002. It went on to warn of a shortage of trained pilots and that this

shortage would continue until 2012 even if pilot output meets set targets every year. This document also noted that MOD costing systems do not identify flying training costs or the relative importance of individual cost elements.

It went on to note that Army and Navy pilot trainees have 13 hours of flying experience after they are graded while RAF accepts trainee pilots after 90 hours of flying at University Air Squadrons. NAO recommendations for these programs included:

- Reviewing the way aptitude tests and trainees are graded are applied equally across the Services to ensure best value is obtained from existing, relatively cost-effective aptitude tests;
- Ensuring that information on training activity and facility, trainers, and trainee performance is collected is collected in a standardized way to facilitate training activity analysis;
- Ensuring that targets set at various stages reflect overall targets and objectives, have a common format, and are soundly based on analysis of current and potential performance.⁵

A 4 December 2002 NAO report on MOD *Major Project Reports* noted several RAF programs with the Eurofighter Typhoon fighter being behind its initially

targeted June 2002 in-service date but progress was made in April 2002 with three instrumented production aircraft; that September 2001 saw the RAF achieve service for its Short-Term Strategic Airlift by leasing four C-17s from the U.S.; and noted the UK's early involvement with the multinational U.S.-lead Joint Strike Fighter program including a contribution of \$2 billion.⁶

17 July 2007 saw NAO issue a report on MOD's transformation of logistics support for fast jets. Assessment findings noted that depth repair hubs had been created on military bases involving collaboration with industry; the use of lean managerial techniques to improve repair process efficiency; support costs and manpower requirements have decreased due to this transformation; this transformation can be further exploited but there are risks requiring careful management involving Tornado and Typhoon aircraft; and the importance of MOD maintaining momentum if this transformation is to be sustained.⁷

Recommendations from this report include:

- MOD should improve its ability to provide the level of Service personnel contracted to work at depth repair hubs at RAF Marham and RAF Cottesmore.

- MOD should improve spare parts availability by working with industry partners to address problems preventing pulse lines from running as efficiently as planned.
- MOD should improve guidance and consistently apply a common methodology for constructing internal benchmarks to assess against the value of proposed contracts.
- MOD should use the opportunity provided by transferring budget accountability to frontline commands, including RAF strike command, to align incentives between frontline customer and support organisations in order to consider impact of frontline activity on support requirements.
- Savings gained from transformations, including contracts, should be given to teams to invest in future improvements.⁸

A 30 March 2010 NAO report saw stringent criticism made of MOD's multi-role tanker aircraft capability program. This document noted that it could find no evidence that MOD engaged in sound evaluation of alternative procurement routes when it began this program; that technical specifications continued evolving late in the procurement process; that MOD never gained visibility to detailed sub-contractor costs and margins for the aircraft and their modification; that negotiating this contract has required the department to rely on aging Tristar

and VC-10 aircraft; and that original aircraft requirements did not envision flying into high-threat environments such as Afghanistan. Report recommendations include establishing a common understanding with commercial partners of the full service that will be delivered in new projects early in the procurement process; incorporating contract manual updates into the existing document handling system on at least an annual basis; and MOD implementing a stakeholder plan to include service levels and contractual change implications.⁹

NAO's 2013 *Major Projects Report* issued on 13 February 2014 noted a £263 million pound increase in combat aircraft costs; average combat and air support project delays of 25 and 23 months; problems with timely supply and equipment repair on Typhoon aircraft; listing an uncertain date for placing the JSF Lightning into service, and noting a £19 million drop in this program's cost.¹⁰

Recurring problems with military flying training were revealed in a 12 June 2015 report. Findings included new pilot core training having been delayed for nearly six years with overall pilot training funding falling from £6.8 billion to £3.2 billion; MOD failing to hold pilot training contractor Ascent accountable for its performance between 2008-2012 in areas such as cost and schedule control and work quality; that MOD contractual incentives do not incentivize Ascent to

improve training quality or reduce overall training time and cost; that contracting with an external provider for fixed training capacity gives MOD less flexibility to quickly respond to change; that MOD does not use existing data effectively to understand current training performance; and there is an unclear process for reducing flying training costs.¹¹

NAO's *2017-2027 Equipment Plan Report*, issued on 31 January 2018 warned of a £179.7 billion gap in MOD's 10-year equipment and support budget including contingency operations. It also expressed concern that project cost estimates are optimistic and may increase; forecasts costs for supporting new equipment such as the JSF F-35 Lightning II are "inherently immature," and that MOD has limited flexibility to address funding shortfalls for equipment and support. This document also noted the absence of reliable data on the costs of supporting the F-35 once it becomes operational; that the 1 April 2017 strength of the military was 4% below the required regular strength of 144,200 set for 2020 by the *Strategic Defense and Security Review*; that the support costs of managing complex JSF software could increase; and the presence of multiple Typhoon contracts leave no overarching cost model and making treatment of project risks immature.¹²

Commons Defence Committee-This eleven member committee

[https://www.parliament.uk/business/committees/committees-a-z/commons-](https://www.parliament.uk/business/committees/committees-a-z/commons-select/defence-committee/)

[select/defence-committee/](https://www.parliament.uk/business/committees/committees-a-z/commons-select/defence-committee/) examines MOD administration, expenditure, and policy, and that of associated organizations according to rules applying to other Commons committees established in this chamber's Standing Order 152.

Committee members are appointed by the House of Commons and the committee has the authority to request persons, papers, and records; chooses the subjects it investigates; gather evidence; and engage in investigations which may last several months before issuing reports.¹³

Internet access to parliamentary committee publications are publicly available from 1997-present. On 18 January 2006 this committee issued a report with accompanying witness testimony entitled *Delivering Front Line Capability to the RAF*. Topics addressed in this document included how MOD was changing its logistics support for front line aircraft; the role and performance of the Defence Aviation Repair Agency (DARA); and RAF support for Harrier GR9 and Tornado GR4 aircraft. Conclusions and recommendations reached by this report include welcoming MOD's decision to adapt modern production techniques to achieve savings and efficiencies; recommending MOD seek out and eliminate deficiencies in its aircraft support processes without undermining maintenance quality to meet

efficiency targets; stressing that Tornado support at RAF Marham is inferior to that provided at DARA St. Athan; expressing concern that MOD's decision about aircraft support provision is not founded on consistent principles; that MOD has caused unnecessary turbulence and uncertainty in aviation logistics provision; and stressed its concern over MOD's decision to commit £104 million to the Red Dragon aviation repair project in South Wales knowing that providing future support for this was under review.¹⁴

In its 23 March 2006 response to this report, MOD contended that its management reforms would achieve £70 million in savings over the next four years and £40 million annually after that while significantly increasing aircraft operational availability. It disputed the committee report's contention that MOD had produced unnecessary turbulence and uncertainty in aviation logistics provision arguing that new air depth support arrangements provide greater clarity and certainty to the armed forces and industry. MOD also disputed that Red Dragon was wasteful maintaining that it allowed DARA to move from an obsolete World War II facility to a single purpose-built facility.¹⁵

In light of Britain's 2011 involvement in the effort to overthrow Libya's Muammar Qaddafi, the Defence Select Committee issued a two-volume report on

25 January 2012 expressing its views on the RAF's role in Operation Ellemy. Topics addressed in this inquiry included background on British involvement, the role of United Nations resolutions, NATO's role, British contributions to this operation include the role of the National Security Council, air, maritime, and intelligence, surveillance, and targeting (ISTAR) capabilities, aircraft carrier and Harrier force performance, and munitions, and implications for future operations. Testifying before this inquiry MOD noted its participation in this operation involved:

At its peak, some 2,300 British servicemen and women were deployed on Operation ELLAMY. We deployed 32 aircraft including 16 Tornado GR4s, six Typhoons, five attack helicopters, refuelling tankers and specialist surveillance aircraft and helicopters. Over the course of the operation we also deployed eight warships and attack submarines.¹⁶

Minister of Defence Philip Hammond said that the UK flew over 2,000 strike sorties over Libya out of 9,646 NATO strike sorties as of 23 October 2011 while also contributing Storm Shadow and Brimstone air-launch missiles to this mission.¹⁷

The Committee's assessment of this operation praised the courage, dedication, and professionalism of military and civilians taking part in Ellamy. It went on to

stress concern that large numbers of man-portable surface-to-air missiles (MANPADS) held by pro-Gaddafi forces were missing; voice displeasure that France began air operations without consulting NATO allies; worried that future operations like this would not be possible without U.S. ability or willingness to provide unmanned aerial vehicles and intelligence and refueling aircraft; urged MOD to give higher priority to developing signals intelligence capability in the next *Strategic Defence and Security Review*; expressed pleasure at the Typhoon's reliable performance and of the Joint Helicopter Command's ability to deploy helicopters to the Mediterranean and maintain numbers in Afghanistan; favorably noted the high performance and accuracy of air munitions such as the Brimstone missile while also noting shortages of these munitions; and contended that the U.S. decision to not lead this operation required European NATO members to face their own responsibilities and acknowledge gaps in their military capabilities.¹⁸

30 April 2012 saw the government response to this report. This document noted that British, French, Libyan, and U.S. efforts had recovered nearly 5,000 MANPADS and their components; contended that Anglo-French military and political cooperation was generally exemplary; stressed British support for NATO's Smart Defense Initiative intended to enable allies to acquire military capabilities they could not acquire unilaterally; noted Britain is enhancing its ISTAR capabilities

by replacing the Nimrod R1 with the Airseeker Program and acquiring 3 Rivet Joint aircraft from the U.S.; and that capability delivered by the Tornado and Typhoon would not have been possible from existing British aircraft carriers.¹⁹

A 12 December 2017 report by this committee on the controversial and costly F-35 Lightning program examined multiple financial, mechanical, and technological matters concerning this aircraft and its relevance for the Royal Navy and RAF. Specific report conclusions and recommendations included the need for Lightning using the Multifunctional Advanced Data Link (MADL) to communicate with older aircraft; pleasure that Lockheed Martin and MOD were conducting rigorous cyber testing of Automated Logistics Information System (ALIS) software rectifying most software bugs; expressing disgruntlement about MOD's failure to provide adequate cost estimates for the entire program or on a per aircraft basis; and the need for MOD to provide the Committee with program updates every six months.²⁰

In its 26 February 2018 response to this report, MOD stressed its ongoing commitment to delivering the F-35 on-time and within budget to provide cutting-edge capability for British armed forces and national security. MOD also stressed its desire to improve interoperability between defense and security systems across

air, land, sea, and cyber domains; stressed the importance of individual users of non-JSF aircraft of receiving data only relevant to the F-35; contended the government has provided a 10 year F-35 budget including support costs for 48 aircraft through 2048; rejected claims there is no cost transparency by noting annual U.S. GAO and U.S. Department of Defense Office of Operational Test and Evaluation (OTE) reports on program status; and expressed willingness to provide the Defence Committee with six month updates within classification and commercial sensitivity constraints.²¹

16 August 2018 saw MOD issue its first six-month update on implementing committee recommendations for F-35 program updates. This document noted that these aircraft continue to be delivered on time and within budget. Four Lightning F-35B aircraft arrived at RAF Marham on 6 June 2018 with a further five arriving on 3 August 2018. MOD also reported continuing progress with the ALIS software and advances in using MADL to enhance fourth and fifth generation fighter connectivity. Front-line training in the UK is anticipated to achieve British Initial Operating Capability by the end of 2018.²²

Commons Public Accounts Committee –According to Commons Standing Order 148, this seventeen member committee

<https://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/> examines "the accounts showing the

appropriation of the sums granted to Parliament to meet the public expenditure, and of such other accounts laid before Parliament as the Committee may think fit."

It scrutinizes the monetary value of public spending, including economy, effectiveness, and efficiency, of public spending while aspiring to hold government and civil servants accountable for public service delivery.²³ Committee origins date back to 1856 when a House of Commons Select Committee recommended establishing a committee to oversee government accounts. This committee formally came into existence in 1861 with the support of individuals as varied as Sir Francis Baring (1800-1868), Henry John Temple (Lord Palmerston)(1784-1865); and William Gladstone (1809-1898). The 1866 Exchequer and Audit Act and the 1869 establishment of a uniform accounting system of public spending being laid before Parliament for the first time represented further strengthening of parliamentary oversight of government spending.²⁴

Although this committee's remit covers the panoply of British Government spending, it is still able to conduct detailed scrutiny of MOD and RAF programs. A 15 April 2011 report by this committee examined Typhoon fighter spending. The Committee noted that this multi-role multinational consortial aircraft with air

defense and ground attack capabilities was begun by MOD in 1998 with an initial purchase of 53 aircraft and an estimated cost of £37 billion over the next 20 years. Original plans called for buying 232 aircraft but that order had been reduced to 160 aircraft and retiring the 53 oldest aircraft in 2019. Although the project's inception dates to the 1980's, MOD has repeatedly been excessively optimistic on costs; spare part supply problems keep the Typhoon from flying the requisite hours; it is necessary to cannibalize parts from other aircraft to maximize aircraft availability; insufficient pilot training is occurring, and only 8 of 48 Typhoon pilots are capable of executing ground attack missions.²⁵

Conclusions and recommendations reached by this report include maintaining MOD's cost per aircraft estimate of £73 million should actually be £126 million; the 2009 decision to retire air defense Tornado F3 aircraft to save costs means that Typhoon's ground attack capability is not being used and reflects an overall failure to control defense spending by ignoring long-term value for money; and MOD reliance on a small cadre of industrial suppliers who have the technical and design capability to build, support, and upgrade Typhoon demonstrates that MOD is not supplying evidence that single source supply provides value for money. The Public Accounts Committee recommended MOD should engage in more robust analysis to determine the most cost effective balance between cannibalizing aircraft, buying

more spare parts, and accepting increased operational risks; that there should be one person responsible for leading delivery of key Typhoon capabilities; and MOD should evaluate its collaborative projects portfolio to determine what worked well or failed and why these outcomes occurred. These recommendations were fully implemented by the Government.²⁶

A 25 April 2017 report by this committee stressed concern about the affordability of MOD's equipment plan. It noted this plan remains vulnerable to increasing costs due to uncertainties around new project costs, continued cost-control programs on some long-standing projects, and the pound's significant fall against the U.S. dollar. It noted that MOD had used over £10 billion previously set aside to fund its existing core program leaving little flexibility to address changing military priorities. The Committee noted its concern that increasing commitments without increasing funding jeopardizes MOD's ability to deliver equipment needed by the military at real risk.²⁷

This assessment also noted that the F-35 Lightning and P-8 Poseidon maritime patrol aircraft were particularly vulnerable to exchange rate fluctuations; that extra funding for the Typhoon had increased overall funding sustainability problems; and one committee witness stressed that 2019-20 would feature an

foreign exchange risk “bite” for the F-35 and P-8. In its 12 October 2017 response to committee recommendations, the government agreed with the committee’s recommendation that the next Equipment Plan submitted to Parliament should report on progress being made against its 2015-2016 plan targets and detail the impact on the Plan of any funding shortfall resulting from failing to meet these targets and resulting time slippages or individual project cost increases. This response also agreed with the committee that new project costings are firmly established as quickly as possible and that cost increases are incorporated into the following year’s plan.²⁸

A 14 March 2018 report by this committee saw MOD acknowledge that cannibalization was a common practice for the Army and Royal Air Force when other supply options were exhausted but MOD could not quantify how frequently this occurred.²⁹ 11 May 2018 saw this committee express increased concern about the financial sustainability of MOD’s Equipment Plan contending:

These risks have now increased and the Ministry of Defence simply does not have enough money to buy all the equipment it says it needs. It is worrying that the Department is back in the position it found itself in earlier in the decade. The Equipment Plan for 2017 to 2027 is not realistic and the

Department lacks cost control. A significant affordability gap has again opened up; with forecast costs at least £4.9 billion, and potentially as much as £20.8 billion, more than the £179.7 billion budget. The Department is reluctant to present openly an assessment of the affordability gap and has failed to report transparently to Parliament and the public about the financial risks it faces.

The Department has put its faith in the Modernising Defence Programme to solve its affordability issues and to prepare for the continued challenges of a fast-changing defense landscape, including the UK's capabilities for cyber, chemical, biological, radiological, nuclear and electromagnetic attacks. We are highly skeptical that the Modernising Defence Programme (MDP) will be able to return the Department to a balanced position³⁰.

Committee recommendations to rectify this funding shortfall included MOD reporting within three months on its timescale for concluding the MDP; this program needing to develop long-term capability to maintain sufficient flexibility to respond to defense landscape changes; ensuring the Equipment Plan has greater clarity about equipment costs and spending; informing Parliament of specific improvements on F-35 cost and progress; and reporting progress on F-35 cost reductions.³¹ In its July 2018 response to these recommendations the government agreed to report its assessment on the time for concluding MDP; will

work on increasing the flexibility of its response to the changing defense landscape; and will strive to improve its reporting transparency and provide more realistic cost estimates on the F-35 programme.³²

All Party Parliamentary Group on Drones-The All Party Parliamentary Group on Drones (APPGD) <http://appgdrones.org.uk/> was established in October 2012 and consists of 66 members from the Houses of Commons and Lords. Its objectives include examining the use of drones by for domestic and international military and civilian purposes focusing on:

- U.S. use of drones in Pakistan, Somalia, Yemen, and elsewhere.
- British drone use internationally.
- Domestic British use of drones for law enforcement³³.

APPGD has attempted to influence British parliamentary drone policymaking through Early Day Motions which are formal motions submitted to the House of Commons for potential debate, presented evidence for parliamentary committee evidence sessions dealing with drone-related topics, and held meetings on various aspects of the drones and their policymaking aspects during the group's existence which are documented on their website.³⁴

A 12 June 2017 document submitted to APPGD by University of Portsmouth Reader in Politics and Ethics Dr. Peter Lee contained several revelatory findings on the effects experienced by RAF Reaper drone operators from recent and ongoing operations. Lee surveyed 76 individuals with 42 of these being currently serving RAF Reaper crew members, 16 former Reaper crew members, and 18 spouses/partners of current or former Reaper crew members. The three questions asked by Lee which he considered most important for this committee's submission include:

1. How well prepared were you for Reaper operations and operational tempo?
2. To what extent does the conduct of Reaper operations impact upon your family and personal life?
3. To what degree, if at all, have you been changed by your experience on Reaper operations?³⁵

Key findings of Lee's research include RAF Reaper operators experiencing physical fatigue from the relentlessness of sustained operations over time; witnessing distressing events such as killing distant enemies; negative effects on morale brought by how these operators are presented and perceived in public media coverage; some instances of Post-Traumatic Stress Disorder (PTSD);

negative impact on immediate family and other relationships including grumpiness, impatience, irritability, and withdrawal; and fatigue from a work shift pattern of six days on duty consisting of 10-12 hour work days and three days off duty for most of the past decade. Break times during this working period were more commonly used for carrying out non-flying duties instead of eating and resting and some operators able to effectively compartmentalize the killing process and sustain high performance levels over several years.³⁶

Recommendations advocated in this submission include:

- Providing Reaper operators mandatory psychologist sessions every three or six months or more frequently which can be used for promoting a new military mental health paradigm.
- Parliament considering awarding medals to Reaper personnel for meritorious service having significant tactical or operational impact.
- The RAF putting drone personnel sustainability at the heart of future staff level planning and operational practices.
- All potential drone personnel should undergo an introduction to remote warfare ethics to clearly understand the nature of such operations, the responsibilities they must bear, and improve the likelihood they will make informed and sustainable decisions about whether they can do the job.³⁷

Discussion and Analysis-These examples indicate that civilian and military policymakers, students, and highly motivated individuals and organizations interested in British national security policymaking covering the RAF have multiple avenues available for accessing reliable information on such policymaking via NAO, parliamentary select committees and APPG groups. Thorough discussion of policymaking problems with defense programs as documented by NAO and parliamentary defense and public accounts committees can cause these programs to be reduced or cancelled as the precedent of the Royal Navy's Type 45 Daring class destroyer demonstrates.³⁸

Although British parliamentary committees do not have the coercive power U.S. congressional committees in terms of the power of purse, they can gather valuable information on governmental policymaking which can cause changes in such policymaking and financial expenditures. Varying assessments exist on the degree to which British parliamentary and U.S. congressional committees influence national security policymaking in their respective countries.³⁹

The reluctance of the British Parliament to approve British military action against Syria in 2013, in contrast to the preemptive government use of the royal prerogative to use force against Libya in 2011, represented clear parliamentary

disenchantment and a delayed response to the controversy engendered by committing British military forces to operating in Iraq in 2003. A 2017 scholarly analysis of parliamentary approval of British military operations maintains “parliament can now be considered an *informal veto player* over decisions on war involvement.” This assessment also maintained that legislative-executive relations prior to the 29 August 2013 parliamentary veto of British participation in military action against Syria despite Bashir Assad’s government’s use of chemical weapons represented an assertive parliament constantly scrutinizing the government and seeking to bind its decisions which then saw David Cameron’s government act as if it was bound by parliamentary prerogative.⁴⁰

Understanding parliamentary scrutiny of RAF programs and other areas of British government policymaking can also be augmented by watching webcasts or listening to podcasts covering parliamentary reviews of many of these programs through parliamentlive.tv/ which is available from December 4, 2007-present. This provides researchers the opportunity to see how witnesses and MP’s react when they are testifying before Parliament and asking questions of witnesses as part of the parliamentary scrutinizing process. This helps create more transparent policymaking for those interested in how the British government conducts its national security policymaking and is similar to the service provided for U.S.

Government policymaking by the C-SPAN archive <https://www.c-span.org/about/videoLibrary/> featuring selected content back to 1987.⁴¹

Conclusion-This analysis has demonstrated that NAO, parliamentary select committees, and the APPGD all produce substantive and credible public policy debate and analysis of operational policy and financial matters affecting the RAF and other British governmental agencies. Readily available public access to such materials should be a hallmark characteristic of democratic governance without compromising the ability of national security policymakers to execute their missions. NAO and parliamentary entities will continue analyzing and advising on the managerial, operational, and technical performance of RAF programs and conduct oversight on these programs and their financial performance in the years to come. These entities will also analyze, document, and evaluate the RAF's performance and that of other MOD entities in current and emerging multi-domain operational activities all British military forces engage in including air, cyberspace, land, sea, space, the electromagnetic spectrum and the human or cognitive domain including artificial intelligence, and the role of data analytics in military strategizing and decision-making. British Ministry of Defence strategy documents released during March 2021 will also receive fine-toothed scrutiny.⁴²

The information resources described here should be regularly consulted by serious students, scholars, civilian and military policymakers, and motivated members of the general public interested in the role played by the RAF and other MOD elements in British national security policymaking. They allow these individuals to see the financial, managerial, and operational successes and failures of these programs, how government agencies and parliamentarians respond to developments in these programs, and facilitate enhanced understanding of how these programs affect British national security and the value for money they provide for taxpayers. These resources are also informative for non-British users interested in accessing freely available resources on how that country provides public access to some of its national security policymaking programs on topics as varied as artificial intelligence's impact on military operations, air combat scenarios and defense procurement programs including the emerging 6th generation Tempest jet fighter program.⁴³

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