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Rolling Thunder The US Bombing of North Vietnam 1965 – 1968

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ROLLING THUNDER: THE UNITED STATES BOMBING OF NORTH VIETNAM 1965-1968

American military involvement in Vietnam started in 1961 with the deployment of small-scale units which acted in an advisory capacity to the developing South Vietnamese armed forces. The advisory role soon expanded into active participation in military operations in South Vietnam and Laos in an attempt to counter widespread insurgent operations supported by North Vietnam. For much of the American involvement in Vietnam the focus was on reducing the supply of men and materials from North Vietnam through the Ho Chi Minh trail network to the South. However, several events in late 1964/early 1965, including the so-called Gulf of Tonkin Incident and the bombing of American barracks, gave the US the opportunity to strike directly at North Vietnam itself.

Following two retaliatory strikes, code named Flaming Dart, in February 1965, the first raid of the sustained Rolling Thunder bombing campaign took place on 2 March. Right from the start there was an uneasy relationship between the US military and the US government with the President and the Department of Defense assuming an unprecedented degree of operational control over the military campaign. The precept of the Rolling Thunder campaign was that limited bombing raids would be stepped up gradually in concert with diplomatic efforts to force the North Vietnamese to cease their support of the insurgency in the South. Targets were carefully selected and restrictive rules of engagement were drawn up in Washington. Many lucrative targets such as North Vietnamese airfields and industrial complexes close to major cities were prohibited from being bombed, despite the pleas of the military leaders. The war was conducted largely through the Joint Chiefs of Staff in Washington who had to gain political approval for almost everything. It should be remembered that the conflict in Southeast Asia took place at the height of the Cold War with the memory of Korea and the Cuban Missile Crisis still fresh in the minds of the politicians and public alike. The 'Domino Theory' of Communist world domination was very much in vogue at this time and South Vietnam was the place where the USA decided to make a stand. A major concern of US policy makers was the thought that an intensive bombing campaign might cause the open involvement of China and Russia, both political and material supporters of North Vietnam. It was these fears that shaped the direction of what came to be a three-and-a-half year bombing campaign that largely failed to produce the desired results and led to political turmoil in the USA, disillusionment in the US military and the loss of valuable lives and equipment.

The US military was certainly not blameless in making the quagmire that was the Vietnam War. The military often failed to see the wider view that their requests for a more comprehensive, more intense bombing campaign involved. Few Generals were prepared to give the politicians the real facts, preferring to concentrate on statistical analyses, sortie rates, tonnage of munitions dropped rather than face the truth that the bombing was not having the required effect. Indeed USAF air power doctrine, based as it was on Cold War strategic doctrine, was found to be found wanting in Southeast Asia in what was usually referred to as a "limited war". The USAF and US Navy was frustrated in that the politicians refused to release what the military considered to be the 'real' targets in North Vietnam. But generally speaking the level of industrialisation and logistical effort required by North Vietnam to sustain the war in the South was greatly overestimated by US analysts, so the effects of an all-out bombing campaign might still not have proved decisive.

The Rolling Thunder campaign was halted in November 1968, largely for political reasons, and it would be another four years before North Vietnam was again subjected to a concerted bombing campaign during the Linebacker raids which were mounted in response to the North Vietnamese invasion of the South in 1972.

There is a large amount of information available in a variety of forms (books, periodical articles, electronic documents and audio-visual material) on the Rolling Thunder campaign. The JSCSC Library holds multiple copies of most of the major texts cited in this guide as well as much supplementary material.

Monographs

General Works

The United States Air Force has produced two official histories that together cover the bombing of North Vietnam from 1965 through to 1973. **VAN STAAVEREN** covers the early phases of Rolling Thunder up to late 1966 from where **THOMPSON** (*To Hanoi and Back*) completes the history. Thompson's book goes on to cover later bombing campaigns and includes appendices that cover the entire Rolling Thunder campaign. Although both these books give a very good account of the bombing of North Vietnam, it must be remembered that these are USAF official histories and therefore the authors do not necessarily represent the often contradictory political arguments over the policy, planning and execution of the air campaign. Also the US Navy's significant contribution to Rolling Thunder is referred to only briefly by both authors so the histories cannot claim to be totally comprehensive.

One of the most important books on the bombing of North Vietnam, certainly from the strategic and political aspects, is the incisive *The Limits of Air Power* by **CLODFELTER**. A balanced and analytical account, Clodfelter's book is also more easily digestible than some of its counterparts. He looks at Rolling Thunder and other campaigns in terms of US strategic bombing doctrine and charts the course of the campaigns and their results. **THOMPSON'S** *Rolling Thunder* also concentrates on the strategic aspects of the air campaign but is much less accessible than Clodfelter's work. Thompson's focus is on the military-political relationship and attempts to explain the reasons for the campaign's lack of success in terms of management theory rather than air power doctrine. **RHYNEDANCE**'s US Army War College paper also explores the often uneasy relationship between the military and political leaders in Washington. More straightforward military and events-focussed accounts are given by **DORR** and **SMITH**. Of the two books Smith's work is the more comprehensive and analytical but Dorr's book is more concise, presenting the whole Rolling Thunder campaign in just four, well-illustrated chapters. In their War College theses both **DREW** (*Rolling Thunder 1965*) and **ELLSWORTH** cite political and doctrinal limitations for the failure of the Rolling Thunder campaign and both authors give a balanced assessment of the failures of both the military leaders and the politicians alike. **DRAKE** is more specific in his study of the effect of civilian-imposed Rules of Engagement which, he argues, almost guaranteed failure by violating the principles of war as well as US air power doctrine.

The Rolling Thunder campaign was only one aspect of a very wide-ranging war, albeit a very important aspect. To put Rolling Thunder into context it would be useful to view some of the more general accounts of the air war. **LITTAUER and UPHOFF**'s masterly analysis of the effects of the air war in Vietnam was also one of the earliest academic studies, originally released before the end of the war. Chapter 3 concentrates on Rolling Thunder and provides a very succinct account of the campaign, backed up by some useful statistics and comments on the cost of the war and other issues. **TILFORD** provides a study of USAF air power doctrine which he highlights as being the prime cause of the failure of the Rolling Thunder campaign. Despite originally being written for the USAF Air University, the book is incisive and openly critical of USAF policy. The opening chapter is a particularly useful explanation of how Air Force doctrine evolved prior to the Vietnam War. **FRANKUM** also offers an account of the Vietnam air war with a single chapter devoted to the Rolling Thunder campaign. The author concentrates more on the military aspects of the campaign and in general it appears to be a useful account but a number of minor factual errors throws doubt on the whole work. **DORR and BISHOP'S** highly-illustrated account of the Vietnam air war cuts the war into easily digestible chunks both chronologically and thematically, but it is not easy to gain an overall impression of the Rolling Thunder campaign from this book.

The bombing of North Vietnam has occasionally been used as an example or a case study in books on air power in general. One of the better accounts is the opening chapter of **NORDEEN**'s book which is devoted to an account and analysis of Rolling Thunder. **HONE**'s succinct account of the bombing operations against North Vietnam forms part of a chapter in Cargill Hall's vast work on strategic air

power. The seminal work by **PAPE** presents air power as an instrument of coercion so it is not surprising that a chapter is devoted to Vietnam where the author draws out the reasons for the strategic failure of Rolling Thunder and contrasting it with the more successful Linebacker II campaign.

Air-to-Air Combat

One of the major surprises that the US encountered during its bombing raids on North Vietnam was the difficulty in dealing with the North Vietnamese air defence system, particularly the MiG fighters and SA-2 surface-to-air missiles, although anti-aircraft guns and small arms fire shot down more aircraft than both these weapons combined. The air combat action that took place over North Vietnam is the focus of a number of books headed by **MICHEL**'s work *Clashes*. Written by a Vietnam veteran and ex-air attaché to Israel, this is one of the most comprehensive and authoritative accounts of air-to-air combat during the Vietnam War. Like other authors he highlights the difference in the success rates of US Navy fighter pilots compared to their USAF counterparts and the measures taken to address this. One of the earliest books to present the facts about USAF air-to-air combat in Vietnam is by **FUTRELL** and others. The listing of successful USAF air engagements provides the basis for analysis by later authors. A shorter analysis of the USAF air-to-air experience during Rolling Thunder and Linebacker is given by **NELSON and WOOD** and originally published as a USAF official monograph. **SCUTTS** provides a more specific work in that he follows the exploits of the F-4 Phantom-equipped 8th Tactical Fighter Wing which was one of the most successful fighter units in the war over North Vietnam. A more wide-ranging study is that by **HANNAH** who focuses on the plight faced by the USAF's Tactical Air Command in meeting the challenges required to adapt to the air war in Southeast Asia. The issues include doctrine, technology and training, all of which the author claims put the TAC at a considerable disadvantage throughout much of the war.

Electronic warfare played a major role in the air war over North Vietnam with major efforts being mounted to provide electronic counter-measures (ECM) against the threat from SAMS, MiGs and radar-controlled guns. **PRICE**'s immense history of US electronic warfare has several chapters devoted to EW during the Rolling Thunder years including information on the Wild Weasel anti-SAM effort. The ECM and early warning role of the EB-66 aircraft which accompanied the strike forces into North Vietnam is well documented in the pamphlet by **VAN NEDERVEEN**. Even more detail on the contribution of the USAF's EB-66 squadrons and crews is provided by **SAMUEL**. Among the targets that could be struck in North Vietnam were railway and road bridges and one of the most enduring legends of the war is the US efforts to destroy the Thanh Hoa bridge, which withstood many raids until it was finally put out of action in 1972. This is related by **WADDELL and WOOD** who highlight the much greater effectiveness of the later precision-guided munitions compared to the 'dumb' bombs that were used during Rolling Thunder.

Unfortunately, much of the information about North Vietnam's counter-air operations comes from American sources. However, the Vietnamese have produced an official history of the war, *Victory in Vietnam*, translated from the original work written at the **MILITARY INSTITUTE OF VIETNAM**, although the book has to be read carefully to extract the required data on the air defence of North Vietnam. The book lacks any major sections purely on air operations but there is some useful information embedded in the text and the book has a very detailed index. More focused is **TOPERCZER**'s pamphlet on the North Vietnamese Air Force which brings together much information not previously published in the West on this subject.

US Navy Operations

Although the USAF receives most of the attention in the literature on the air war over North Vietnam, the US Navy also played a major role in Rolling Thunder by basing several aircraft carriers in the Gulf of Tonkin. The Navy flew strikes against allocated sectors of North Vietnam sometimes in conjunction with, and sometimes seemingly in competition with, the USAF. There are four books that give an overview of the Navy's part in the air war over Vietnam with Rolling Thunder being featured in each one. The most detailed and comprehensive work is by **FRANCILLON** who provides a good general account followed by a record of the USS *Coral Sea*'s seven cruises off Vietnam, all backed up by some very useful and detailed appendices. There is little to choose between the other three texts.

LEVINSON builds his book around the personal reminiscences of 22 naval aviators who served in the war but covers a wide range of roles and missions. The books by **MERSKY and POLMAR** and by **NICHOLS and TILLMAN** both provide general accounts of the Navy's air war, with the latter book also using personal accounts as well having some useful appendices. However, it is fair to say that in general the story of the US Navy's part in Rolling Thunder comes through less much clearly than that of the USAF.

Personal Accounts

There are several first-hand accounts available from aircrew who took part in the Rolling Thunder missions. Most of the books are by pilots who flew the F-105 Thunderchief which was the primary bomber aircraft used during Rolling Thunder. **BELL, LENSKI** and **RASIMUS** tell of their exploits in the Thunderchief as does **BROUGHTON** in his two books which are openly critical of the management of the air war over North Vietnam at every level. **LUCKETT and BYLER** tell the story of Jim Kasler, another Thunderchief pilot who took part in many missions over the North before being shot down and taken prisoner. The F-4 Phantom was also used as both a fighter and a bomber on Rolling Thunder missions and **McCARTHY** tells his story of missions over the North. Books by US Navy pilots are very scarce and only **FOSTER**, who was an A-4 Skyhawk light bomber pilot has much to say about the Rolling Thunder campaign. Finally, **SHERWOOD** tells the story of several pilots who flew missions over North Vietnam including a USAF Wing commander a Navy fighter pilot and a Marine Corps A-6 Intruder pilot.

Periodical Articles

There are numerous periodical articles available on various aspects of the Rolling Thunder campaign. Two of the better general accounts include those by **BOYNE** and **CORRELL**, both of which are concise and straightforward. **WILSON** offers a more analytical study by looking at Rolling Thunder through the Clausewitzian theory of war in an attempt to explain the campaign's failure to achieve its aims. The articles by **DREW** (*Two Decades in the Air Power Wilderness*) and **WENDT** concentrate on the failure of USAF doctrine to deter the insurgency sponsored by North Vietnam and both give a balanced assessment of military and political failings. **PAPE's** article *Coercive Air Power in the Vietnam War* expounds his theory of military coercion by using the bombing of North Vietnam as a case study. This article was the forerunner of his book on air power coercion. **ROBINSON** studies the reasons for the failure of Rolling Thunder concluding that it was the American's lack of understanding the enemy rather than any command and control failings that was the root cause of the failure. An interesting commentary of the part played by high-level military command and control is provided by **BERG** who points out the sometimes uneasy relationship between the Services in-theatre but, perhaps predictably, concludes that in the final analysis it was the 'system' that was at fault, not the leadership. **LAURIE** highlights the part played by political advisor Walt Rostow as an advocate Rolling Thunder using his experience of analyzing strategic bombing during World War Two.

Other authors focus on particular aspects of the air war over North Vietnam. The two articles by **PLUNKETT** provide an excellent account of the evolution in technology that enabled the USAF to bomb in all weathers, day or night, by using radar to locate targets and, incidentally, demonstrating the Vietnam War's role as an operational testing ground. Air-to-air combat against the North Vietnamese MiGs is studied by **SAYERS** and **YOUNG**, with a follow-up to Young's article by **ARMSTRONG** who relates his personal experiences during an F-105 tour in 1967/68. **PRIBBENOW** provides a rare and most interesting analysis of the North Vietnamese military response to the US bombing campaign of Hanoi in 1967 whereby the entire North Vietnamese air defence system was greatly improved to withstand the American attacks. Finally **PARKS** looks at Rolling Thunder in relation to the Law of War and concludes that the politicians who placed severe restrictions on the bombing campaign actually ignored or failed to understand the law or the principles behind it.

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