

SAASS 627

AIR POWER IN THE AGE OF TOTAL WAR

AY 2021

24 August-25 September 2020



ILLUSTRATION FROM WALT DISNEY'S PRODUCTION "VICTORY THROUGH AIRPOWER"

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Syllabus Approved: _____ Date: _____

SAASS 627: Air Power in the Age of Total War

Course Description: This course examines the historical development of air power and strategy in the crucible of the two World Wars. SAASS 627 explores a number of issues dealing with airpower development and employment during that period. The course is organized around a series of core books, selected for their impact upon airpower's theoretical development, their contribution to our understanding of airpower's influence on events, or because they raise issues worthy of discussion and examination.

The topic is vast, and this short course cannot claim to be all-encompassing. Many interesting and relevant topics—the air war on the Eastern Front, airpower's vital role in winning the Battle of the Atlantic, and Allied tactical air in Western Europe, for example—are not covered. The course does attempt to look at diverse topics (strategic bombing, air defense, tactical aviation, naval aviation, economics and air warfare, morality) as they developed in several major airpower nations. The course progresses from early experience, through the golden age of airpower theory (some of which you have already studied in SAASS 600), to the hard school of the Second World War. Three short chapters from John Andreas Olsen's edited anthology *A History of Air Warfare*, covering World War I and World War II in Europe and the Pacific, will provide background, and that book can serve as a reference for the remainder of your SAASS studies.

Although our focus in the course is on the past, the takeaways point to the future. Your predecessors grappled with many of the same issues we confront today. How well did they do? What can we learn from their mistakes, and their successes? What will future historians say of us?

Faculty:

Dr Richard R. Muller, Course Director

Dr James M. Tucci

Dr Thomas A. Hughes

Dr Rob Hutchinson

Seminar rules: All the threads of this course—reading, thinking, reflecting, and learning—come together in our seminar time. In order to have a meaningful discussion, engagement with the readings is a must. If one is to discuss airpower and strategy effectively, one must have mastered the facts and the arguments. The only way to accomplish this is to read, think, speak, and write—a lot. So come to class dressed and ready to play.

Academic requirements: You will complete an essay of approximately 3000 words. It is due on the final course day, **25 September 2020**. Your response to the prompt should reflect your mastery of both the assigned course material and additional primary sources to be made available. The assignment also draws on the historical methodology instruction in SAASS 690 scheduled for 21 September. The week of 21-25 September should provide you ample time to complete the assignment. Your instructor will supply further details, as well as the actual prompt, during the course.

Grading: Your final grade will be determined as follows: 60% essay grade, 40% seminar contribution.

Additional Readings: The literature on air power from 1914-1945 is incredibly rich and growing almost daily. Please see the course director or your instructor for additional reading suggestions or about potential thesis topics.



**Full of promise: Rollout of the Boeing 299, prototype of the B-17 Flying Fortress,
16 July 1935**

COURSE OUTLINE

DAY 1: 24 August: The Dilemma of Positional Warfare

Alastair Horne, *The Price of Glory: Verdun 1916*.

Steeped in the cult of the offensive, the armies of Europe squared off for what many expected would be a short, sharp conflict. Sharp it was; short it was not. The “Great War” ended only after four years of bloodletting and the destruction of the prewar world order. Technological development and industrialization favored the defense, and military professionals grappled with the problem of how to deal with this reality. Today’s reading examines one of the war’s key battles, which in the words of one historian “consumed the young men of a medium-sized town every morning, and every afternoon, for the ten months it lasted.”

DAY 2, 25 August: Baptism of Fire and Crucible of Airpower Theory: The Great War

“The First World War, 1914-1919,” in John Andreas Olsen, ed., *A History of Air Warfare*, pp. 3-25.

Lee Kennett, *The First Air War*.

The airplane was widely seen as a toy in 1914--yet by 1918 modern air force organizations were an indispensable element of national defense. Nearly all of the modern airpower roles and missions—air superiority, strategic attack, ISR, interdiction, close air support--emerged during the First World War. Just as importantly, the advent of military aviation seemed to suggest a new type of warfare, providing ample grist for the postwar mill of airpower theory.

DAY 3, 27 August: Mitchell and the American Experience

William Mitchell, *Winged Defense*; Peter Faber, “Interwar US Army Aviation and the Air Corps Tactical School: Incubators of American Airpower”, in Philip S. Meilinger, ed., *The Paths of Heaven*, pp. 183-238.

The United States was a latecomer to World War I and to military aviation, but embraced the new form of warfare with some zeal. Billy Mitchell is best known as a crusader and zealot whose professional self-immolation prematurely ended his career, but he was also a thoughtful writer and thinker regarding the wider potential of military and civil aviation. Out of Mitchell’s ideas developed the sophisticated targeting schemes of the Air Corps Tactical School’s “industrial web” theory, as well as ideas about air force organization that still reverberate.

DAY 4, 28 August (ZOOM FRIDAY): Shrinking the Globe

Jennifer Van Vleck, *Empire of the Air: Aviation and the American Ascendancy*

Hap Arnold, John Slessor, and Billy Mitchell would make most people's lists of significant air power movers and shakers. But what about Juan Trippe? The colorful head of Pan American Airways had a vision of the future of aviation that was as sweeping as Douhet's. Commercial aviation transformed 20th century civilization and cut across all the instruments of national power. This recent book—which bridges the Golden Age of Aviation, World War II, the Cold War, and the recent past—addresses an aspect of air power that is often given short shrift.

DAY 5, 31 August: The German Experience

"The Air War in Europe, 1939-1945," in Olsen, *A History of Air Warfare*, pp. 27-52.

James Corum, *The Luftwaffe: Creating the Operational Air War*

After the Allied victory in 1945, many airmen dismissed the German air force, or Luftwaffe, as a mere tactical air force, swept aside in a war in which the long-range strategic bomber was the weapon of choice. Yet German airmen were reacting to a very different set of priorities and constraints than their counterparts faced. At least in the short run, the Luftwaffe was better situated to meet the challenges of a European war than its Polish, French, and British adversaries. Yet these strengths concealed serious weaknesses which a lengthy war of attrition would unmask.

DAY 6, 1 September: The Battle of Britain

Stephen Bungay, *The Most Dangerous Enemy*.

80 years ago this month, the biggest air battle the world had yet seen was reaching its climax. The Battle of Britain is so shrouded in myth that is difficult to examine it for what it was: a clash between the two most technically advanced air forces of the day, one emphasizing the power of the air offensive, the other employing the first practical integrated air defense system. Of the hundreds of books on the Battle, this one is the best—it gives full play to the competing national and air strategies, the operational decisions, the technology, and the element of chance that ultimately determined the outcome.

DAY 7, 3 September: The Bomber Offensive: Planning and Execution

Tami Davis Biddle, *Rhetoric and Reality in Air Warfare*

For many airmen, the bombing of Germany was the central event of the Second World War. All the prewar theories of the warring air forces faced a sustained test. The USAAF bombed by day, attempting to eliminate vital choke points in the German war economy, while RAF Bomber Command waged a lengthy campaign against German cities—the Night Area Offensive. Neither side’s campaign unfolded as planned. A vigorous German air defense halted USAAF unescorted daylight bombing in fall 1943, and RAF Bomber Command failed to break German morale. Yet when Allied troops came ashore on D-Day, there was no German air force to meet them, and the powerful German army fought at a disadvantage, starved of fuel and pinned to the ground by Allied airpower. How then do we assess the contributions of the bomber offensive to Allied victory?

DAY 8, 8 September: The Bomber Offensive: The Target State

Adam Tooze, *The Wages of Destruction: The Making and Breaking of the Nazi Economy*, pp. xix-xxvii, 203-676

For decades, both advocates and critics of air power have cited the effect strategic bombing had—or did not have—on the German nation. Yet many of these judgments took place in the absence of any real knowledge of the workings of the Nazi war economy. Adam Tooze’s book is valuable to students of strategy on many levels. He examines the central role the Luftwaffe played in German economic planning. He discusses the impact of the bombing on the Nazi economy, and reappraises the efforts of Albert Speer’s Armaments Ministry to stave off collapse. It would be hard to find a better discussion of the nexus between economic planning, grand strategy, and air power.

DAY 9, 10 September: The CBO: The Human Dimension

Kevin Wilson, *Men of Air: The Courage and Sacrifice of Bomber Command in World War II*

Analyses of the bomber war tend to focus on strategy, doctrine, technology, and economic impact. These are important parts of the story, but they do not always account for the human dimension. Air power application ultimately depended on the success or failure of the bomber crews—each a small group of highly trained specialists fighting a new type of war often poorly understood. This highly readable work focuses on the lesser known (at least in the US) experience of RAF Bomber Command. Night after night, these crews set out to attack German vital centers, in the sincere belief they were doing their part to shorten the war. Over 57,000 of them never returned.

Day 10, 11 September (ZOOM Friday). The Pacific: The Carrier War

“The Air War in the Pacific, 1941-1945” in Olsen, *A History of Air Warfare*, pp. 53-79.

Craig Symonds, *The Battle of Midway*

War in the Pacific demanded a different “skill set” than was called for in Europe. During the 1930s, both the United States and Imperial Japanese navies incorporated aviation into their war plans and operational doctrines. Even before Pearl Harbor, the aircraft carrier began to supplant the battleship as the cornerstone of sea power. Though there was no single Mahanian “decisive battle” in the Pacific, the dramatic Battle of Midway in June 1942 was nevertheless a turning point. This recent book is an outstanding study of carrier operations, as well as the key roles of intelligence, code breaking, and chance in modern war.

DAY 11, 14 September: The Pacific: Before the Pivot

Thomas E. Griffith Jr., *MacArthur’s Airman: General George C. Kenney and the War in the Southwest Pacific*

Certain war theaters demanded a flexible approach from air commanders, and none more so than the Southwest Pacific Area (SWPA). Far from the center of the action, working for a notoriously difficult and demanding superior in a hostile physical environment, George C. Kenney turned his Fifth Air Force into a highly successful member of the joint team. He is widely regarded as the first modern Combined Forces Air Component Commander (CFACC). The history of air power sometimes emphasized technology at the expense of people, so reading a biography reminds us of the human dimension of aerial warfare.

DAY 12, 15 September: Trash Hauling and International Relations

John Plating, *The Hump*.

Early air power theorists saw the air as the new commons, competing with the sea as a gateway to an emerging globalism. They foresaw guns and bullets and bombs, to be sure, but they also gleaned air power’s capacity to supply and connect distant places. World War II’s global scope offered ample opportunity for air power’s many roles. In the China-India-Burma Theater, air power’s capacity to act as a diplomatic lever grew to prominence in ways that suggested its latter-day strategic utility in non-kinetic operations. In operations there, air power’s effect was measured in ways different from bombing campaigns. Today, the non-kinetic use of air power continues to have vast strategic potential for the nation willing and able to think with some agility about military aviation.

DAY 13, 17 September. Air Warfare and Morality
Michael Sherry, *The Rise of American Air Power*

As student of ethics in warfare Michael Walzer tells us, there is value in “winning well”—that is, fighting even a total war within the boundaries of “*jus in bello*” (just conduct in war). Some argue that in bombing German and Japanese civilians, the Allies, despite the rightness of their cause and the evil nature of the Axis, overstepped these boundaries. Some authors even equate the fire bombings of Dresden and Tokyo with the genocide at Auschwitz. Historian Michael Sherry rejects this extreme viewpoint, yet is critical of the American tendency towards “technological fanaticism” that undergirded the bomber offensive. His book is sure to generate spirited debate and provide an important dimension to our examination of the formative decades of the evolution of air power.

DAY 14, 18 September (ZOOM Friday): World War II Reinterpreted?
Phillips Payson O’Brien, *How the War was Won: Air-Sea Power and Allied Victory in World War II*

When we think of decisive turning points of the Second World War, battles such as Moscow, Stalingrad, El Alamein, and Normandy jump to the fore. This new work argues that while such epic land battles were dramatic and costly, their strategic significance pales in comparison with the cumulative effects of aerial and naval activity. Land battles may have represented the pinnacle of joint operational art, but the strategy of the major powers was dominated by air and sea power. This work represents a dramatic reappraisal of the “master narrative” of the Second World War.

DAY 15, 21 September: SAASS 690: Historical Methodology

The sessions today will emphasize techniques of historical research and argumentation. Tactically, this session will help you incorporate primary resources into your course essay. Strategically, it will provide you with methodological tools to help in your selection and development of a thesis topic.

COURSE PAPER DUE: COB Friday, 25 September 2020