

SAASS 627

## AIR POWER IN THE AGE OF TOTAL WAR

AY 2022

23 August- 28 September 2021



Syllabus Approved: \_\_\_\_\_ Date: \_\_\_\_\_

## SAASS 627: Air Power in the Age of Total War

**Course Description:** This history course examines the 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 tactics 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, airmobility, economics and air warfare) 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.

The course culminates with a historical staff ride to the Mediterranean, during which you will examine historical campaigns ranging from ancient times through the 1940-41 World War II fighting in Greece and Crete.

Although our focus in the course is on the past, the implications 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 in-class essay on **16 September 2021**. Your response should reflect your mastery of the assigned course material and the seminar discussions. You are also responsible for researching, preparing, and presenting two “stands” during the Mediterranean staff ride.

**Grading:** Your final grade will be determined as follows: 50% essay grade, 30% seminar contribution, 20% staff ride presentations.

**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: 23 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 2, 24 August: Mitchell, ACTS, and the American Experience**

**William Mitchell, *Winged Defense*; Haun, *Lectures of the Air Corps Tactical School and American Strategic Bombing in World War II* (read emphasizing the actual lectures; skim the commentary)**

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 3, 26 August: 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 20<sup>th</sup> 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 4, 27 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 5, 30 August: The Battle of Britain**

**Stephen Bungay, *The Most Dangerous Enemy***

82 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 it 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 6, 31 August: The Air War in the Med.**

**Robert C. Ehlers, *The Mediterranean Air War***

Today’s seminar leverages the summer reading assignment, Douglas Porch’s *The Path to Victory*, and will also help you to place the field study trip into historical context. The Mediterranean theater has sometimes been described as a “sideshow” and a distraction from the main events on the Western and Eastern Fronts. As both Porch and Ehlers argue, there is a strong case to be made for the theater’s strategic importance. Additionally, Ehlers maintains that the Med was a rich source of doctrinal and operational evolution that paved the way to Allied victory in World War II.

**DAY 7, 2 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, 7 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, 9 September: 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 10, 10 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 11, 13 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 12, 14 September. 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 13, 16 September, 0800-1300: IN-CLASS ESSAY**

You will write a response to an essay prompt which will be sent to you at 0800. Your response is due to your instructor NLT 1300. The assignment is an individual effort, but it is open book, open notes, and may be completed at the location of your choosing.

**DAY 14, 17 September. The Battle of Crete: Staff Ride Preparation**  
**Antony Beevor, *Crete: The Battle and the Resistance***

As we get ready to depart on our trip, we will read and discuss a general history of the Crete campaign in 1941 and an account of the ruthless COIN campaign the occupying German forces waged against the partisans. This will provide a common framework for the individual presentations that will comprise the academic portion of our staff ride next week.

**19-28 SEPTEMBER: SAASS FIELD PRACTICUM: GREECE AND CRETE STAFF RIDE**

The staff ride is a time-honored method of learning from the past. We will travel to Greece and Crete and will explore historical sites connected to classical Greece, the 1940-41 Axis invasion, and especially Operation MERKUR, the airborne invasion of Crete in May 1941. Each student is responsible for researching and presenting at two selected sites. Teaching faculty on the trip will also offer insights on some of the locations. Your seminar instructor and the Trip Director, Dr Tucci, will provide additional information.