



***AIRPOWER I:  
CAPABILITIES AND LIMITATIONS IN  
THE COMMAND OF AIRPOWER***

**SYLLABUS**

**AY 21**

**JOINT PROFESSIONAL MILITARY EDUCATION  
PHASE I INTERMEDIATE LEVEL COURSE**

**UNITED STATES AIR FORCE  
AIR COMMAND AND STAFF COLLEGE  
*Twenty-First Century Leaders for Twenty-First Century Challenges***

**AIR COMMAND AND STAFF COLLEGE  
MAXWELL AFB, AL**

**FOREWORD**

This syllabus for the Airpower I course for the Air Command and Staff College, October-November 2020, provides both an overview of the course narrative and objectives, as well as a detailed description of each lesson to assist students in their reading and preparation for lecture and seminar. Included herein is information about the course's methods of evaluation, the schedule, and the fulfilment of joint professional military education core goals.

Airpower represents one of the greatest opportunities and challenges of modern times. How we approach that challenge is now in your hands.

SIGNED

Jordan R. Hayworth, PhD  
Course Director, Airpower I

APPROVED

James W. Forsyth, Jr., PhD  
Dean

## TABLE OF CONTENTS

	PAGE
FOREWORD	1
TABLE OF CONTENTS	2
ACSC RESIDENT PROGRAM OUTCOMES	3
COURSE DESCRIPTION AND OBJECTIVES	3
COURSE ORGANIZATION AND NARRATIVE	3
JOINT LEARNING AREAS AND OBJECTIVES	5
AY20 SPECIAL AREAS OF EMPHASIS	9
COURSE REQUIREMENTS	9
COURSE ADMINISTRATION	10
COURSE SCHEDULE	
DAY 1	12
DAY 2	14
DAY 3	16
DAY 4	18
DAY 5	19
DAY 6	21
DAY 7	23
DAY 8	25
DAY 9	26
DAY 10	28
DAY 11	30
DAY 12	32
DAY 13	32
DAY 14	34
DAY 15	35
APPENDIX: COURSE FACULTY	37

## **AIRPOWER I COURSE OVERVIEW**

### **ACSC RESIDENT PROGRAM OUTCOMES**

Airpower I (AP1) mainly links to two of the ACSC Resident Program Outcomes:

1. Articulate the capabilities and limitations of military force, particularly airpower, in the effective integration of the instruments of national power.
2. Apply military theory, operational art, joint concepts, and doctrine to develop effective warfighting plans for multi-domain operations.

### **COURSE DESCRIPTION**

AP1 examines the emergence and development of airpower from the First World War through the early 1970s. It analyzes the development of key ideas, capabilities, organizations, practices, and limitations that framed the conduct of air warfare in the first three-quarters of the twentieth century. These landmark case-studies in the application of airpower continue to inform debates about airpower's purpose, utility, and effectiveness. This course will allow students to comprehend the historical development of airpower and the organizational DNA of the United States Air Force. Course readings, lectures, and seminar discussions will cultivate adaptive leaders and critical airpower thinkers by challenging officers to examine the evolution of airpower and how it fulfills national security outcomes.

### **COURSE OBJECTIVES**

1. Comprehend the development of airpower from the First World War through the early 1970s.
2. Comprehend the relationship between current doctrine and the application of airpower at the tactical and operational levels of war.
3. Comprehend the influence of leadership, doctrine, organization, technology, acquisitions process, and theory on the evolution of joint airpower and the organizational DNA of the United States Air Force.
4. Comprehend the lessons of airpower history to analyze the capabilities, limitations, and effectiveness of airpower in the current and future joint fight to fulfill national security outcomes in complex and uncertain environments.

### **COURSE ORGANIZATION AND NARRATIVE**

In a 2017 book titled *The Future of War: A History*, Lawrence Freedman identifies three distinct periods in the history of twentieth century conflict. The first period was dominated by great power conflict in which the militaries of the great powers focused on attaining decisive victories to end wars as quickly as possible. This period included the First and Second World Wars and lasted until the end of the Cold War. What followed has been defined by various terms such as the "End of History," the "Unipolar Moment," and the "*Pax Americana*." Although these ideas suggested a future of peace and prosperity, the rising prevalence of irregular wars indicated that utopian optimism was unfounded. In a series of conflicts from Africa to the Balkans to the Middle East, Western militaries found that traditional strategies for decisive battles often failed

to produce satisfying national security outcomes.

By the twenty-first century, many strategists had attempted to rethink strategy for an age of so-called “New Wars” that required less kinetic force and more nuanced strategies. Yet just as Western militaries were refocusing on irregular wars, Freedman identifies a shift to a third period that involves a renewed possibility for great power conflict. The rise of China and the resurgence of Russian power and aggressiveness, along with states like Iran and North Korea, indicate that great power wars are a possibility that Western militaries cannot ignore. How to prepare for large-scale conflicts while still possessing the right strategies for smaller, irregular wars has become a central challenge for the American military. The fact that it and its partners have to achieve this delicate balance amid an on-going Information Revolution in which technology is increasing the prominence of the space and cyber domains makes this an even greater challenge.

Airpower I and II adopt Freedman’s model to examine the development and employment of airpower in the twentieth and twenty-first century. Both courses use historical case studies to promote critical thinking about the capabilities and limitations of airpower as a tool of national security strategy. Given the terrible human and material costs of conventional great power wars, American military leaders have devoted considerable effort to winning them as quickly and decisively as possible. In particular, the bloody stalemate of the First World War – perhaps best epitomized by the slaughter at Verdun – drove interest in achieving decisiveness in warfare. As you learned in War Theory, airpower provided one of the most attractive means of achieving decisiveness in twentieth century conflict, either by destroying the enemy surface forces from the air or by attacking the enemy’s home front. It was in this context of great power conflict and total war that airpower was born.

For most American Airmen, the outcome of the Second World War vindicated their belief that airpower was an instrument of decisiveness and that it produced inherently strategic effects. AP1 allows students to explore this debate in depth while studying the past to learn how airpower can be effective in great power conflict. The idea of airpower as a decisive instrument with deterrent capabilities became foundational for the newly independent US Air Force in 1947, and it remains essential today. In the context of the Cold War, both conventional and nuclear airpower were used to deter the Soviet Union and to achieve decisive victory if deterrence failed. At the same time, American involvement in limited proxy wars in Korea and Vietnam forced the USAF to adapt to other forms of warfare. Finding the proper balance between tactical, operational, and strategic levels of war became a central concern for American airpower, especially as tactical and operational success in Korea and Vietnam did not translate into clearly achieved strategic objectives. In particular, the military’s ability to achieve decisive victory seemed highly suspect after Vietnam.

What followed was nothing less than an attempted transformation of American military power and airpower. Remaining focused on possible war with the Soviet Union and other conventional threats, the American military pursued new ways of training, new doctrine, and innovative technology to stay ahead in the fight. Drawing upon lessons learned from previous and contemporary conflicts – including Vietnam and the Arab-Israeli Wars – the US military searched for a new paradigm to achieve decisive victory should the next great war occur. In addition to improved conventional military means, the continued expansion of American deterrence capabilities in air and space left the Soviet Union strategically disadvantaged. When

the Cold War ended, the American military strategy seemed to have been largely validated. Not long after, the aggression of Saddam Hussein's Iraq was countered in Operation Desert Storm (ODS). Coming at the end of the Cold War, Desert Storm seemed to display airpower's potential to achieve decisive victory in any regional conflict that the United States and its allies were likely to embark upon.

Unlike the preceding century, the 1990s were characterized by the absence of foreseeable great power conflict. The USAF was reformed in light of a new geopolitical and military theory that suggested it would most likely not fight in great power conflicts. Instead, it had to be prepared to intervene when necessary in smaller regional conflicts and civil wars. In 1999, the Kosovo conflict provided an opportunity to test this new paradigm. Though debate persists regarding the exact impact of airpower in the success of Operation Allied Force (OAF), most observers recognize that airpower greatly contributed to the outcome, with some claiming that OAF demonstrated airpower's ability to win wars by itself.

The confidence and certainty with which Americans entered the twenty-first century was shaken but not destroyed by the events of 9/11. As the United States embarked upon Operation Enduring Freedom, the belief that airpower and other forms of military power would produce decisive results was nearly unquestioned. And in fact, the campaign did decisively defeat the Taliban and helped destroy Al Qaeda's global terrorist network. In 2003, Operation Iraqi Freedom's "shock and awe" campaign saw airpower topple the regime of Saddam Hussein, seemingly producing even greater decisiveness than ODS. Yet in both Afghanistan and Iraq, violent insurgencies soon undermined American confidence in military power's ability to bring about ongoing positive strategic outcomes.

Today, as we face increased uncertainty regarding the future, the American military may be left with significant questions about the proper role of airpower. As land and sea power remain vital to American national security, and as space and cyber power continue to develop and evolve amid an on-going Information Revolution, the joint force faces the challenge of achieving strategic effect with airpower through multiple domains. While terrorists and insurgents remain significant threats to American national security, we are already seeing a return to great power rivalry and conflict. While the future is always unclear, it seems likely that the emergence of near-peer threats will profoundly shape American national security strategy. After careful study and discussion of the historical and contemporary development of airpower, you will be better prepared to help develop the best course of action to ensure that airpower remains capable of achieving national security outcomes.

## **JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)**

AP1 addresses Intermediate-Level College Joint Learning Areas and Objectives for Joint Professional Military Education (JPME), established by the Chairman of the Joint Chiefs of Staff via the Officer Professional Military Education Policy (OPMEP), CJCSI 1800.01E, signed 29 May 2015. The course supports the following Joint Learning Areas and Objectives, listed below with points of explanation:

### **Learning Area Objective 1 – National Military Capabilities Strategy**

- a. Comprehend the capabilities and limitations of US military forces to conduct the full range of military operations in pursuit of national interests.

- Lessons AP-502, AP-503, AP-504, AP-506, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-516, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-526 discuss the capabilities and limitations of naval and air forces from both theoretical and historical contexts in achieving strategic objectives at the tactical and operational levels of war.
- c. Comprehend how the U.S. military is organized to plan, execute, sustain, and train for joint, interagency, intergovernmental, and multinational operations.
- Lessons AP-503, AP-504, AP-506, AP-509, AP-510, AP-511, AP-512, AP-516, AP-517, AP-518, AP-520, AP-521, AP-522, AP-523, AP-524, relate/examine historical and current US military and airpower structures (people/units, equipment, employment, limitations) to meet national-level military and political objectives in a complex and uncertain environment.

### **Learning Area Objective 2 – Joint Doctrine and Concepts**

- a. Comprehend current joint doctrine.
- Lessons AP-503, AP-508, AP-510, AP-512, AP-514, AP-516, AP-518, AP-520, AP-521, AP-524, AP-526 introduce students to joint doctrine that relates to airpower.
- b. Apply solutions to operational problems in a volatile, uncertain, complex or ambiguous environment using critical thinking, operational art, and current joint doctrine.
- Lessons AP-501, AP-502, AP-503, AP-504, AP-505, AP-507, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-525, AP-526 examine both continuity and change in the conduct of war and the changing character of conflict. Additionally, they address the adaptation and assessment of framing/re-framing objectives, lines of effort, and measures of performance in meeting strategic questions and objectives.

### **Learning Area Objective 3 – Joint & Multinational Forces at the Operational Level of War**

- a. Comprehend the security environment within which Joint Forces are created, employed and sustained in support of JFCs and component commanders.
- Lessons AP-503, AP-504, AP-506, AP-507, AP-511, AP-513, AP-515, AP-517, AP-522, AP-525 examine the security environment and/or provide context for understanding the application of airpower.
- b. Comprehend Joint Force command relationships.
- Lessons AP-506, AP-509, AP-511, AP-512, AP-517, AP-518 examine and analyze the strategic, operational, and tactical level conduct of air forces and its leaders in relation to the overall command structures and how the use of the airpower weapon contributes to the overall conduct of war, including continuity and change in the relationships between them.

- c. Comprehend the interrelationships among the strategic, operational, and tactical levels of war.
  - Lessons AP-501, AP-502, AP-503, AP-504, AP-506, AP-507, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-515, AP-516, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-526 explain the theory and principles of joint operations at the operational level of war via historical case studies and examples.
- d. Comprehend how theory and principles of joint operations pertain to the operational level of war across the range of military operations to include traditional and irregular warfare that impact the strategic environment.
  - Lessons AP-501, AP-503, AP-504, AP-506, AP-508, AP-519, AP-520, AP-521, AP-523, AP-524 draw from both historical and contemporary examples of how the US military formulated theories and strategies to affect the outcome of strategic objectives.
- f. Analyze a plan critically for employment of joint and multinational forces at the operational level of war.
  - Lessons AP-504, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-525, AP-526 examine planning military operations that include joint and multinational forces at the operational level of war, with a particular focus on the role of airpower.
- g. Comprehend the relationships between national security objectives, military objectives, conflict termination, and post conflict transition to enabling civil military authorities.
  - Lessons AP-502, AP-503, AP-504, AP-505, AP-506, AP-507, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-515, AP-516, AP-517, AP-518, AP-520, AP-521, AP-522, AP-523, AP-524, AP-525, AP-526 consider the relationships between war and political objectives to achieve meaningful national security outcomes.

#### **Learning Area Objective 4 – Joint Planning and Execution Process**

- c. Comprehend the integration of joint functions (command and control, intelligence, fires, movement and maneuver, protection and sustainment) to operational planning problems across the range of military operations.
  - a. Lessons AP-502, AP-504, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-516, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-526 discuss the capabilities and limitations of operational planning and functions across the range of military operations in theoretical and historical context.

- f. Comprehend the roles that factors such as geopolitics, geo-strategy, society, region, culture/diversity, and religion play in shaping planning and execution of joint force operations across the range of military operations.
- Lessons AP-501, AP-503, AP-504, AP-506, AP-507, AP-515, AP-517, AP-519, AP-520, AP-521, AP-522, AP-525 examine the myriad of responses to the implementation of aviation and its capabilities in effecting the outcome of major conflict while being measured against geopolitical, societal, cultural, and religious factors to include an understanding of how to manage emerging vulnerabilities and the risks to US and global security interests.

### **Learning Area Objective 6 – Joint Operational Leadership and the Profession of Arms**

- a. Comprehend the role of the Profession of Arms in the contemporary environment.
- Lessons AP-501, AP-502, AP-503, AP-504, AP-506, AP-507, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-515, AP-516, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-525, AP-526, examine the roles and actions of military leaders in the shaping and implementation of the Profession of Arms in the contemporary environment.
- b. Comprehend critical thinking and decision-making skills needed to anticipate and recognize change, lead transitions, and anticipate/adapt to surprise and uncertainty.
- Lessons AP-501, AP-502, AP-503, AP-504, AP-505, AP-506, AP-507, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-515, AP-516, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-525, AP-526 provide examples of theorists and practitioners anticipating and recognizing change in the conduct of war, whether the sources of such change are political, social, cultural or technological.
- c. Comprehend the ethical dimension of operational leadership and the challenges it may present when considering the values of the Profession of Arms.
- Lessons AP-501, AP-502, AP-503, AP-504, AP-505, AP-506, AP-507, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-515, AP-516, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-525, AP-526 examines and analyzes the human dimension and the challenge it presents in decision-making and strategy in relation to the values of the Profession of Arms.
- e. Communicate with clarity and precision.
- Writing assignments: AP-801, AP-802, and AP-803 assess students' ability to think and write critically about military operations.
  - Lessons AP-501, AP-503, AP-506, AP-508, AP-510, AP-512, AP-514, AP-518, AP-516, AP-519, AP-520, AP-521, AP-523, AP-524, AP-526 examines the ability of leaders to communicate ideas, theories, plans, strategies, tactics, and changes/adaptations across all levels of operational planning to fulfill national

security outcomes. The lessons engage students in critical thinking exercises that allow them to analyze and interpret events and outcomes in airpower employment.

- f. Analyze the importance of adaptation and innovation on military planning and operations.
  - Lessons AP-502, AP-504, AP-506, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-516, AP-517, AP-518, AP-519, AP-520, AP-521, AP-522, AP-523, AP-524, AP-525, AP-526 analyze the importance of adaptation and innovation on military planning and operations in both military theory and contemporary and historical cases

### **SPECIAL AREAS OF EMPHASIS (SAE)**

#### **SAE 1: Global Integrated Operations Information Environment:**

AP-501, AP-506, AP-508, AP-510, AP-512, AP-513, AP-514, AP-515, AP-517, AP-518, AP-519, AP-520, AP-522, AP-523, AP-524, AP-526

#### **SAE 2: Strategic Deterrence in the 21st Century:**

AP-501, AP-503, AP-506, AP-513, AP-514, AP-515, AP-516, AP-523, AP-524

#### **SAE 4: Space Warfighting Domain:**

AP-501, AP-506, AP-516

#### **SAE 5: Return to Great Power Competition:**

AP-501, AP-502, AP-503, AP-504, AP-505, AP-506, AP-507, AP-508, AP-509, AP-510, AP-511, AP-512, AP-513, AP-514, AP-515, AP-516, AP-517, AP-518

#### **SAE 6: Ability to Write Clear, Concise, Military Advice Recommendations:**

AP-508, AP-510, AP-512, AP-514, AP-516, AP-523, AP-524, AP-801, AP-802, AP-803

### **COURSE REQUIREMENTS**

1. **READINGS.** Students are expected to complete all assigned readings for the day prior to lecture and seminar. Students should review the lesson objectives and overviews provided in the syllabus before reading the assigned texts.
2. **LECTURES.** Students will watch all faculty lectures relating to assigned readings and seminar. These presentations complement the readings and seminar discussion, and therefore enhance knowledge of the course concepts. Lectures will be available on Canvas and will provide additional historical background and different perspectives to stimulate and enhance learning in seminar.
3. **SEMINAR PARTICIPATION.** Student participation in seminar discussions is vital to individual learning and success. Each member of seminar is expected to contribute to the discussion whether we meet in the classroom or the virtual environment.
4. **WRITTEN ASSIGNMENTS.** Three graded written assignments fulfill the requirements of the Airpower I course: two 1-2 page reaction papers and one 6-8-page take-home final examination paper.

**5. METHODS OF EVALUATION.** Reaction Paper 1 (20 percent); Reaction Paper 2 (20 percent); Final Exam (60 percent).

### **COURSE ADMINISTRATION**

There are two types of readings in this course: 1) readings from books issued by ACSC, which can be seen listed below with full bibliographic information; and 2) selected electronic files posted on Canvas indicated as “[EL]” (electronic). Full bibliographic information for [EL] readings can be found on the relevant days in the syllabus. Students can access the syllabus, course calendar, and selected readings as well as other supplemental materials on CANVAS.

ACSC provides students with copies of the following course books, listed below in the order that they appear in the course. These readings must be returned at the course’s conclusion:

- Pape, Robert A. *Bombing to Win: Air Power and Coercion in War*. Ithaca, NY: Cornell University Press, 1996.
- Olsen, John Andreas, ed. *Airpower Applied: U.S., NATO, and Israeli Combat Experience*. Annapolis, MD: Naval Institute Press, 2017.
- Biddle, Tami Davis. *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*. Princeton, NJ: Princeton University Press, 2004.
- Daso, Dik A. *Hap Arnold and the Evolution of American Airpower*. Washington, DC: Smithsonian Books, 2001.
- Overy, Richard. *The Battle of Britain: The Myth and Reality*. New York: Norton, 2002.
- Overy, Richard. *The Bombers and the Bombed: Allied Air War over Europe 1940-1945*. New York: Penguin Books, 2013.
- Griffith, Thomas E. *MacArthur’s Airman: General George C. Kenney and the War in the Southwest Pacific*. Lawrence, KS: University Press of Kansas, 1998.
- Crane, Conrad. *American Airpower Strategy in World War II: Bombs, Cities, Civilians, and Oil*. Lawrence, KS: University Press of Kansas, 2016.
- Gainor, Christopher. *The Bomb and America’s Missile Age*. Baltimore, MD: Johns Hopkins University Press, 2018.
- Crane, Conrad. *American Airpower Strategy in Korea, 1950-1953*. Lawrence, KS: University Press of Kansas, 2000.
- Corum, James S. and Wray R. Johnson. *Airpower in Small Wars: Fighting Insurgents and Terrorists*. Lawrence, KS: University Press of Kansas, 2003.
- Clodfelter, Mark. *The Limits of Air Power: The American Bombing of North Vietnam*. Lincoln, NE: University of Nebraska Press, 2006.

Please refer any questions to:

- Dr. Jordan R. Hayworth (Course Director, [Jordan.Hayworth@hqau.af.edu](mailto:Jordan.Hayworth@hqau.af.edu), Office 184)

- Lt Col Angela Jacobson (Deputy Course Director, [Angela.Jacobson@hqau.af.edu](mailto:Angela.Jacobson@hqau.af.edu), Office 189)
- Maj Jason Steinlicht (Deputy Course Director, [Jason.Steinlicht@hqau.af.edu](mailto:Jason.Steinlicht@hqau.af.edu), Office 183)

# AIRPOWER I COURSE SCHEDULE

## DAY 1

**DATE:** 19 October 2020

### LESSON OBJECTIVES

1. Comprehend the course objectives, course narrative, course syllabus, methods of evaluation, and expectations for seminar.
2. Comprehend and discuss the Core Missions of the United States Air Force.
3. Comprehend Robert A. Pape's theories of airpower as a coercive instrument and identify and discuss his four coercive air strategies: punishment, denial, risk, and decapitation.
4. Comprehend John A. Warden III's arguments concerning airpower and the knowledge and skills required of airpower professionals.

### LESSON OVERVIEW

#### **AP-500 (L): Course Overview (Hayworth)**

**Overview:** "Airpower" refers to the air, space, and cyber assets available to military leaders for use in conflicts. This course is designed to examine how airpower can contribute effectively to a nation's security, as well as how it has been employed in past conflicts and how it might influence future wars. This day's lecture introduces students to the key concepts and framework of the course.

*CONTACT HOURS: 1.0-hour lecture*

#### **AP-501 (S): Introduction to Airpower I**

**Overview:** In this seminar, instructors introduce themselves to their seminars, discuss classroom policies, and set the stage for seminar discussions scheduled for Day 2. Students should also be prepared to discuss the lecture and the assigned readings. Students will identify and discuss the Air Force Core Missions in order to commence our discussion of airpower's development in the twentieth century. Most important, students will be able to discuss the coercive air strategies identified by Robert A. Pape in order to apply these ideas in subsequent course seminars. The seminar concludes with an important essay from John A. Warden on the airpower profession, which makes many points that will be further developed in the course.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (110)

1. *Air Force Future Operating Concept: A View of the Air Force in 2035*, 11-13. [EL]  
This document explains how the Air Force Core Missions have developed from the Air Force's founding in 1947 to today, and how they will evolve into the future. Students will be able to identify these core missions and, in subsequent course lessons, will study how they have evolved.
2. Robert A. Pape, *Bombing to Win*, 1-86.
3. John A. Warden III, "The Airpower Profession," in John Andreas Olsen, *Airpower Applied*, 342-363.

**JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)**

AP-501 supports the following Joint Learning Areas and Objectives for JPME: 2b, 3c, 3d, 4f, 6a, 6b, 6c, 6e

## DAY 2

DATE: 20 October 2020

### LESSON OBJECTIVES

**Context:** Comprehend how nineteenth century notions of decisive battle in great power war shaped ideas and preconceptions of airpower effectiveness before, during, and after the First World War.

**Experience:** Comprehend how the application of airpower in the First World War helped refine pre-war assumptions about the utility of airpower as an instrument of British and U.S. national security policies.

**Assessment/Integration:** Comprehend the role of cognitive dissonance in shaping and institutionalizing enduring ideas about the optimal effectiveness of cutting-edge military capabilities in future conflict, in particular the idea of strategic attack.

### LESSON OVERVIEW

#### AP-502 (L): Airpower in the First World War (Lukasik)

**Overview:** When the First World War erupted in Europe in 1914, heavier-than-air flight was barely a decade old, and was used in very few military operations. However, it quickly became a vital component to strategy in the First World War, and an indispensable aspect of military operations, particularly on the Western Front. By the end of the war, airpower was used in virtually every role that it fulfills in modern applications, albeit in a much more primitive fashion. This lecture provides a broad overview of the first significant attempts to use military airpower, and demonstrates how important airpower was in the development and employment of strategy during the war.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-503 (S): The Emergence of Strategic Attack

**Overview:** The First World War witnessed the birth not only of airpower application, but also of the ideas that would shape airpower theory and doctrine for decades to come. Many of these ideas were grounded in fantasy and imagination as much as in concrete reality and practical experience. Nevertheless, the relatively limited use of airpower in the strategic attack role shaped the contours of far-reaching discussions among American and British Airmen about the future potential of air warfare to generate strategically meaningful outcomes in wars between industrialized nation-states. This seminar examines airpower in the First World War, with special focus on the emergence of strategic attack and debates about this airpower capability.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (70)

1. Tami Davis Biddle, *Rhetoric and Reality in Air Warfare*, 1-68.
2. JP 3-0 Joint Operations, III-35 – III-36 (Strategic Attack / Global Strike)  
Students should consider the ways in which current joint doctrine on strategic attack has been informed by past discussions and debates about airpower's effectiveness as a strategic instrument.

## **JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)**

AP-502 supports the following Joint Learning Areas and Objectives for JPME: 1a, 2b, 3c, 3g, 4a, 6a, 6b, 6c, 6f

AP-503 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2b, 3a, 3c, 3d, 3g, 4f, 6a, 6b, 6c, 6e

## DAY 3

DATE: 22 October 2020

### LESSON OBJECTIVES

**Context:** Comprehend how the legacies of the First World War and the geopolitical, economic, and technological frameworks of the interwar period influenced the development of airpower in Europe and North America.

**Experience:** Comprehend how factors like geography, economics, politics, and institutional culture shaped the development of airpower in Germany, France, Britain, and the United States between the world wars.

**Assessment/Integration:** Comprehend the factors that shape airpower development and employment as an instrument of national power.

### LESSON OVERVIEW

#### AP-504 (L): Interwar Airpower Theory and Application in France and Germany (Muller)

**Overview:** This lecture examines the myriad of responses to the aviation experiences of the First World War that were followed by major powers during the interwar period. By comparing the types of aerial services created by France and Germany, Dr. Muller of SAASS demonstrates the “paths not taken” by the British and American airpower organizations, and shows there was no common conception of aviation in the interwar period.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-505 (S): The Emergence of Airpower Theory and Doctrine in Britain and the United States

**Overview:** While France and Germany largely concentrated their airpower on supporting ground force maneuver on the eve of the Second World War, most airpower leaders in Britain and the United States embraced the idea of strategic attack as airpower’s primary mission. This seminar explores the factors that shaped airpower’s development in Britain and the United States during the interwar period. Students will be able to compare and contrast the way that British and American airmen understood airpower and the idea of strategic attack. The seminar will allow students to continue discussion of Tami Davis Biddle’s discussion of cognitive dissonance in military organizations by examining the way that British and American airmen strove to enhance capabilities of the newly emerging air domain. Beyond providing a detailed analysis of the emergence of airpower doctrine in the interwar period, Biddle’s book provides meaningful lessons for military officers looking to leverage new and all-domain capabilities today.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (106)

1. Tami Davis Biddle, *Rhetoric and Reality in Air Warfare*, 69-175

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-504 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2b, 3a, 3c, 3d, 3f, 3g, 4c, 4f, 6a, 6b, 6c, 6f

AP-505 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3a,

3c, 3d, 3g, 4f, 6a, 6b, 6c, 6e, 6f.

## DAY 4

DATE: 23 October 2020

### LESSON OBJECTIVES

**Experience:** Comprehend how Gen Henry Harley “Hap” Arnold forged a set of tangible intellectual, technological, and organizational frameworks that served as the basis for the emergence of the United States as the world’s greatest air power during and after the Second World War.

**Assessment:** Comprehend the long-term impact and legacy of Gen Hap Arnold for American national security policy, strategic culture, and airpower.

### LESSON OVERVIEW

#### AP-506 (S): Innovation in Airpower Doctrine, Organization, and Theory

**Overview:** Gen Henry Harley “Hap” Arnold was the central leader in the organizational development of American military airpower that led to the creation of the USAF as an independent service in 1947. Before and during the Second World War, his institutional leadership and vision set the foundation for the strategically coherent employment of American airpower on a global scale. His efforts proved indispensable to the Allies’ victory over the Axis powers, and provided the USAF with a strategic orientation focused on leveraging technological innovation and a holistic understanding of airpower. This seminar explores Arnold’s professional development before the Second World War as well as his legacy and enduring contributions to airpower theory and practice. Students should consider how his military career between the world wars gave him opportunities to grow into an airman capable of playing such a central role in the development of American airpower.

*CONTACT HOURS: 1.5-hour seminar*

**\*REACTION PAPER 1 DUE TODAY AT 1700 ON CANVAS\***

### REQUIRED READINGS (75)

1. Dik A. Daso, *Hap Arnold and the Evolution of American Airpower*, 101-168, 208-214. ( 169-207 optional)

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-506 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 3a, 3b, 3c, 3d, 3g, 4f, 6a, 6b, 6c, 6e, 6f.

## DAY 5

DATE: 26 October 2020

### LESSON OBJECTIVES

**Context:** Comprehend the origins, conduct, and outcome of the Second World War in Europe.

**Experience:** Comprehend the operational dynamics of the air campaign over Britain in the summer and fall of 1940.

**Assessment/Integration:** Comprehend the importance of the Battle of Britain in shaping past and present understandings of airpower effectiveness.

### LESSON OVERVIEW

#### AP-507 (L): Overview of the Second World War in Europe (Pavelec)

**Overview:** This lecture will provide a brief but relevant overview of the Second World War in Europe. It will explain the origins of the war, the geopolitical and ideological stakes involved, the major strategies and operational approaches, the role of industry, and the experience of total war. While much of the course's readings will focus on the British and American war efforts, the lecture will highlight the German and Soviet war experiences to provide context and an alternative perspective.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-508 (S): The Battle of Britain

**Overview:** The Battle of Britain remains the only significant example of a successful defensive air campaign in history. Consequently, it merits careful study by military professionals. The battle's conduct and outcome provide compelling insights into the dynamics of such universal factors in air warfare as the interplay of strategy and technology, the function of leadership and reliable intelligence in shaping the contours of an aerial campaign, and the elusive nature of air superiority. As one of the first major, sustained aerial encounters of the Second World War, the Battle of Britain exercised an important influence on the mindsets of the American and British Airmen who, later in the war, sought to erode Germany's capacity and will to fight by means of a major strategic bombing campaign.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (137)

1. Richard Overy, *The Battle of Britain*, all.
2. JP 3-01 Countering Air and Missile Threats, I-3 – I-8.
3. JP 3-0 Joint Operations, III-33 (Control of the Air / Integrating Air and Missile Defense)  
Students should consider the implications of the Battle of Britain for current doctrinal concepts pertaining to Control of the Air and Integrated Air and Missile Defenses. What does the Battle of Britain tell us about the importance of Air Superiority or Adaptive Domain Control?

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-507 supports the following Joint Learning Areas and Objectives for JPME: 2c, 3a, 3c, 3g, 4f, 6a, 6b, and 6c.

AP-508 supports the following Joint Learning Areas and Objectives for JPME: 1a, 2a, 2c, 3c, 3d,

3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 6

DATE: 27 October 2020

### LESSON OBJECTIVES

**Context:** Comprehend the origins of the theory and practice of tactical airpower in the Second World War.

**Experience:** Comprehend the conduct of the Combined Bomber Offensive (CBO) and evaluate its effectiveness in facilitating the Allies' overarching war aims.

**Assessment/Integration:** Comprehend the conceptual differences between independent and auxiliary approaches to airpower by comparing and contrasting "tactical" and "strategic" airpower in Europe in the Second World War.

### LESSON OVERVIEW

#### AP-509 (L): The American Approach to Tactical Airpower: Theory and Practice in the Second World War (Venable)

**Overview:** Although many of the leading American and British theorists of air warfare expected to conduct a strategic bombardment campaign, to make such a campaign possible, the Allied needed to establish air superiority. Airpower was also used in a tactical role, providing close air support to troops on the ground, and carrying out aerial interdiction missions that crippled the German army's ability to maneuver on the battlefield while placing enormous pressure on its lines of communications and resupply. Each of these missions proved both effective and important in the eventual Allied victory. This lecture examines the role of innovative airmen such as O. P. Weyland, Elwood "Pete" Quesada, Joe Cannon, and Arthur Coningham in developing the theories and practices of tactical airpower.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-510 (S): The Combined Bomber Offensive

**Overview:** The strategic air offensive against Germany defined strategic bombardment in both history and memory. It was the most complex air offensive ever undertaken. The U.S. Army Air Forces (USAAF) were compelled to adapt in real-time along a steep learning curve when operations did not mirror planning. Regardless, American, British, and Commonwealth Airmen mounted an all-out air offensive against German civilian, military, industrial, petroleum, synthetic fuels, and transportation targets in an effort to destroy Germany's ability to continue to fight the Allies. The USAAF's contribution to the Combined Bomber Offensive directly influenced its subsequent institutional independence.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (128)

1. Richard Overy, *The Bombers and the Bombed*, 107-230.
2. JP 3-0 Joint Operations, III-33 – III-35 (Interdiction)
3. JP 3-03 Joint Interdiction, II-9 (Strategic Attack Operations)

Students should consider how the day's lecture and reading inform our understanding of current joint doctrine on Aerial Interdiction. Although the CBO was conceived of by many as a Strategic Attack, Overy suggests that one of its major contributions was impairing Germany's ability to move troops and supplies

across its various fronts.

**JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)**

AP-509 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2c, 3b, 3c, 3f, 3g, 4c, 6a, 6b, 6c, and 6f.

AP-510 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3c, 3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 7

DATE: 29 October 2020

### LESSON OBJECTIVES

**Context:** Comprehend how the Pacific theater's strategic environment demanded greater flexibility from American airpower including naval aviation.

**Experience:** Comprehend the conditions that both facilitated and constrained Gen George Kenney's ability to effectively function as Gen Douglas MacArthur's air component commander.

**Assessment/Integration:** Comprehend the roles and responsibilities of the theater air commander in relation to the theater commander's strategic priorities.

### LESSON OVERVIEW

#### AP-511 (L): Naval Aviation in the Pacific (Springer)

**Overview:** This lecture provides an overview of naval airpower operations in the Pacific theater during the Second World War. It begins with an examination of the Pearl Harbor attack, which demonstrated the revolutionary nature of aircraft carriers, and follows the U.S. Navy's counteroffensive through the Central Pacific, culminating with cross-domain operations against the Marianas Islands, a series of attacks designed primarily to create airbases for strategic attacks against the Japanese homeland.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-512 (S): George Kenney: Airpower Leadership in Joint, Combined, and Coalition Operations

**Overview:** The air campaign in the Southwest Pacific during the Second World War is not as well-known as other, more high-profile air campaigns of that conflict. Nonetheless, it proved a crucial element in the larger strategic context, which framed the ability of American forces to defeat Japan. It also provided the backdrop for the emergence of Gen George Kenney as an airpower leader whose success in confronting a set of leadership and operational challenges marked him as one of the most effective and innovative American air commanders of the twentieth century. Kenney's ability to direct an effective air campaign in a complex operational environment with minimal resources makes his leadership worthy of careful study by contemporary military professionals.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (111)

1. Thomas E. Griffith, *MacArthur's Airman*, 42-153.
2. JP 3-30 Command and Control of Joint Air Operations, I-1 – I-4 (Command and Control of Joint Air Operations)

Gen George Kenney essentially filled the role of the first JFACC under Gen Douglas MacArthur in the South West Pacific Theater. Students should consider how his experience help us understand current doctrine on Command and Control of Joint Air Operations?

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-511 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2c, 3a, 3b,

3c, 3f, 3g, 4c, 6a, 6b, 6c, and 6f.

AP-512 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3b, 3c, 3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 8

DATE: 30 October 2020

### LESSON OBJECTIVES

**Context:** Comprehend how the character of the Pacific War shaped American airpower strategy against Japan.

**Experience:** Comprehend competing visions of airpower's effectiveness as a tool of national strategy in the air campaign against Japan, and how these visions shaped the planning and conduct of the campaign.

**Assessment/Integration:** Comprehend the validity and implications of the claim that the air campaign against Japan fulfilled the prophecies of the classical airpower theorists.

### LESSON OVERVIEW

#### AP-513 (L): *Victory Through Airpower* (film)

**Overview:** This Walt Disney production made with the support of Alexander de Seversky provides a unique insight into American ideas of airpower during the Second World War. Students will discuss in seminar the strategic attack operations against Japan in 1945, which are depicted in a highly romanticized and dehumanized manner in the film. Seminar discussion will tie into the film's depiction of airpower, technology, science, and the bombing of population centers from the air.

*CONTACT HOURS: 1.0-hour film*

#### AP-514 (S): Strategic Airpower against Japan

**Overview:** The strategic bombing of Germany, though an important part of the effort, failed to deliver on the ultimate promise of "victory without ground invasion." With the war in Asia driving towards an amphibious landing of terrible promise, the newly operational B-29, according to many accounts, fulfilled Douhet's vision of strategically effective airpower, replacing the bloodshed of ground combat. This seminar examines the USAAF's air campaign against Japan and the emergence to prominence of Curtis E. LeMay, one of the most successful operational commanders in the history of American airpower.

*CONTACT HOURS: 2.0-hour seminar*

**\*REACTION PAPER 2 DUE TODAY AT 1700 ON CANVAS\***

### REQUIRED READINGS (62)

1. Conrad Crane, *American Airpower Strategy in World War II*, 64-100, 161-186.
2. JP 3-0 Joint Operations, III-36 (Limiting Collateral Damage)  
Does the firebombing and atomic bombing of Japan accord with current joint doctrine on Limiting Collateral Damage? Does this application of airpower meet the principle of proportionality as established in current joint doctrine?

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-513 supports the following Joint Learning Areas and Objectives for JPME: 1a, 2c, 3a, 3c, 3f, 3g, 4c, 6a, 6b, 6c, and 6f.

AP-514 supports the following Joint Learning Areas and Objectives for JPME: 1a, 2a, 2c, 3c, 3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 9

DATE: 2 November 2020

### LESSON OBJECTIVES

**Context:** Comprehend the influence of the grand strategy of containment and the emergence of limited geopolitical crises such as the Berlin Airlift and the Korean War on the employment of airpower.

**Experience:** Comprehend how the proliferation of increasingly powerful nuclear weapons influenced the USAF's perception of its role in America's national security posture as well as its vision of strategic air war.

**Assessment/Integration:** Comprehend the extent to which the advent of nuclear weapons has enhanced or detracted from airpower's effectiveness as an instrument of American national security.

### LESSON OVERVIEW

#### AP-515 (L): Strategies of Containment (Redman)

**Overview:** This lecture provides an overview of U.S. nuclear policy from 1945 through 1962. John Lewis Gaddis identified five strategies of containment that informed U.S. policy during the Cold War. This lecture will examine the first four: the original concept as presented by George Kennan in the "long telegram" and expressed by President Harry Truman (1947-1949); President Eisenhower, Secretary Dulles, NSC-68, and the imperative of the Korean War (1950-1953); President Eisenhower, Secretary Dulles, and the "New Look" (1953-1961); and the early Kennedy Presidency and the beginnings of "Flexible Response." The lecture examines how national security strategy and national military strategy adapted to the strategic change brought about by nuclear weapons and the rise of the Soviet Union in the two decades after the end of the Second World War.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-516 (S): The USAF at the Dawn of the Nuclear Age

**Overview:** The approach to strategic bombing dramatically changed in the early Cold War. During the Second World War, massive fleets of bombers delivered large quantities of conventional weapons against single targets; in many ways, this approach held true following the detonation of the atomic weapons. In the period after the development of hydrogen weapons, massive fleets of bombers were eschewed, first in favor of single bombers and a single bomb being delivered against a single target, and ultimately in favor of a triad that included intercontinental ballistic missiles. This seminar will examine the transformation of strategic airpower that resulted from this new technology. In particular it will examine how new technology drove a fundamental shift in strategic thinking from winning wars to deterring them.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (144)

1. Christopher Gainor, *The Bomb and America's Missile Age*, 20-162.
2. JP 3-0 Joint Operations, VI-3 – VI-4 (Deterrence)

Students should be prepared to discuss how foundational notions of deterrence as established in the 1950s are reflected in current joint doctrine.

## **JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)**

AP-515 supports the following Joint Learning Areas and Objectives for JPME: 3a, 3c, 3g, 4f, 6a, 6b, and 6c.

AP-516 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3c, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 10

DATE: 3 November 2020

### LESSON OBJECTIVES

**Context:** Comprehend the influence of the grand strategy of containment and the emergence of limited geopolitical crises and wars on the employment of airpower in the Berlin Airlift and the Korean War, respectively.

**Experience:** Comprehend the technological, organizational, and command and control challenges that the newly-established USAF confronted in the Korean War, and evaluate its success in overcoming them.

**Assessment/Integration:** Comprehend the extent to which airpower functioned as an effective instrument of national policy in the Korean War.

### LESSON OVERVIEW

#### AP-517 (L): Overview of the Korean War (Beckenbaugh)

**Overview:** This lecture covers the causes, major combat operations, and the outcomes of the Korean War. Highlights include the political, diplomatic, and military activities of the period. Students will leave the lecture with a better understanding of how the Korean War fit into the Cold War as a global historical event and an appreciation for the war's ground combat before reading about the air component.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-518 (S): American Airpower Strategy in Korea

**Overview:** In Korea, a USAF increasingly focused on developing its nuclear capability faced a conventional conflict where strategic airpower did not enable achievement of wartime goals. The disconnect between strategic airpower capability and limitations imposed by national policy challenged airpower leaders to develop an effective strategy to win a limited war in the midst of the larger Cold War context. Forced to adapt, the USAF maintained air superiority, countered communist numerical superiority on the ground and applied pressure to communist forces, which eventually resulted in a negotiated cease-fire.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (136)

1. Mark Clodfelter, *The Limits of Airpower*, 211-223.
2. Conrad Crane, *American Airpower Strategy in Korea*, 1-9, 40-92, 110-131, 155-184.
3. JP 3-09.3 Close Air Support, xi – xiv (Overview of Close Air Support Fundamentals)  
How does the analysis of Close Air Support in historical context help us understand current joint doctrine on Close Air Support?
4. JP 3-17 Air Mobility Operations, vii – xvi (Executive Summary)  
Air Mobility (and today's Rapid Global Mobility) has always been an important mission in the application of airpower. How does the development of American air mobility help us understand current joint doctrine on this Air Force Core Mission today?

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-517 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 3a, 3b, 3c,

3f, 3g, 4c, 4f, 6a, 6b, 6c, and 6f.

AP-518 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3b, 3c, 3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 11

DATE: 5 November 2020

### LESSON OBJECTIVES

**Context:** Comprehend how the confluence of dominant airpower theory, USAF organizational culture, and the character of the First Indochina War shaped the patterns of air warfare in Southeast Asia.

**Experience:** Comprehend the various ways that French, British, and American air services approached using airpower in small wars in the twentieth century and evaluate the strategic utility of each.

**Assessment/Integration:** Comprehend the effectiveness of airpower in producing meaningful strategic outcomes in irregular conflicts.

### LESSON OVERVIEW

#### AP-519 (L): The First Indochina War: Prelude to America's Vietnam War (Hayworth)

**Overview:** This lecture examines the complex geopolitical and strategic situation that led the United States into an ill-defined conflict in Southeast Asia. In the two decades before America's Vietnam War, the French – with substantial American support – fought their own conflict to retain control of Indochina, combatting the same opponents the Americans would face in the 1960s and early 1970s. The United States – and the USAF – found itself tasked with a myriad of new responsibilities ranging from battlefield support, to strategic bombing, to allied training, to support of counter insurgency. Despite Cold War concerns, the Americans ultimately did not directly intervene to save French Indochina, which was finally overthrown after the Vietnamese victory at Dien Bien Phu in 1954. The Americans, however, saw protecting the newly independent and anti-communist South Vietnam as a geopolitical imperative.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-520 (S): Airpower in Twentieth Century Small Wars

**Overview:** This seminar will provide a platform for a broader discussion concerning the utility of airpower in irregular wars by drawing attention to its use dating back to 1916. Students will be prepared to discuss early American airpower experiences in small wars before the Second World War. The readings will also center on British use of airpower in COIN operations in Malaya, South Arabia, and Oman between 1945 and 1975. Each of these examples offer lessons learned to help us understand how airpower can be effective in combatting insurgencies. This seminar sets the stage for the course's analysis of America's war in Vietnam, a conflict in which airpower played a key role.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (99)

1. James Corum and Wray Johnson, *Airpower in Small Wars*, 1-44, 179-218, 423-439.
2. JP 3-24 Counterinsurgency, ix – xxi (Executive Summary)  
Corum and Johnson lay out several lessons learned regarding the use of airpower – and military power more broadly – in COIN operations. How are these reflected in this selection from current joint doctrine?

## **JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)**

AP-519 supports the following Joint Learning Areas and Objectives for JPME: 1a, 2c, 3c, 3d, 3f, 3g, 4c, 4f, 6a, 6b, 6c, and 6f.

AP-520 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3c, 3d, 3f, 3g, 4c, 4f, 6a, 6b, 6c, 6e, and 6f.

## DAY 12

DATE: 6 November 2020

### LESSON OBJECTIVES

**Experience:** Comprehend the factors that accounted for the failure of American ground and air forces' inability to produce favorable strategic outcomes despite their numerous tactical and operational successes in COIN operations in South Vietnam.

**Assessment/Integration:** Comprehend enduring debates concerning airpower's utility as a military instrument in limited war and unconventional conflicts.

### LESSON OVERVIEW

#### AP-521 (S): Airpower and American COIN in South Vietnam

**Overview:** The Air Force struggled to adjust to the ground war in South Vietnam, a role it had neither equipped nor prepared for, but one that was critical to a successful strategic outcome in the war. The Air Force adapted and provided increasingly effective support to the ground forces, but the overall strategy could not address the underlying causes of the insurgency, nor prevent the insurgents from building an effective organization. In the end, the Air Force learned valuable lessons about conventional war and partnering with the joint team, but it could not capitalize on this capability in South Vietnam to achieve anticipated strategic outcomes. This seminar will allow students to apply the lessons learned from James Corum's and Wray's Johnson's text to the American experience in South Vietnam.

*CONTACT HOURS: 1.5-hour seminar*

### REQUIRED READINGS (49)

1. James Corum and Wray Johnson, *Airpower in Small Wars*, 225-274.

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-521 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3c, 3d, 3f, 3g, 4c, 4f, 6a, 6b, 6c, 6e, and 6f.

## DAY 13

DATE: 9 November 2020

### LESSON OBJECTIVES

**Context:** Comprehend the factors that accounted for American ground and air forces' inability to produce favorable strategic outcomes despite their numerous tactical and operational successes between 1965 and 1968.

**Experience:** Comprehend the relative effectiveness of Operation Rolling Thunder in America's Vietnam War.

**Assessment/Integration:** Comprehend the Vietnam War's implications for airpower theory and practice and the USAF's organizational culture.

### LESSON OVERVIEW

#### AP-522 (L): America's War in Vietnam (Weaver)

**Overview:** This lecture will examine American involvement in Vietnam with a particular focus on the challenges of land forces conducting operations against the Viet Cong and North Vietnamese conventional forces from 1964 through 1972.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-523 (S): Bombing Vietnam: Rolling Thunder

**Overview:** Many commenters view Operation Rolling Thunder as a landmark case study in the history of airpower because it presents the useful perspective of "what not to do." In contrast, the culmination of the Vietnam War was a dedicated and hard-hitting strategic bombing campaign against enemy cities and port facilities. Linebacker II is often held up as the decisive air activity of the war, and continues to be interpreted by many as a "war-winning" campaign. This seminar will require students to analyze the use of bombing in Vietnam and the narratives about airpower that have become part of the war's legacy. Did bombing in fact win the war in Linebacker II, as many airpower theorists have alleged? Could it have won the war earlier? This seminar analyzes the successes and failures of the bombing campaigns, and the role airpower played in the final battles of the Vietnam War.

*CONTACT HOURS: 2.0-hour seminar*

### REQUIRED READINGS (111)

1. Mark Clodfelter, *The Limits of Airpower*, 39-146.
2. JP 3-0 Joint Operations, III-27 – III-30 (Intelligence)  
What lessons does the Vietnam War have for our understanding of joint doctrine on ISR?

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-522 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2c, 3c, 3d, 3f, 3g, 4c, 6a, 6b, 6c, and 6f.

AP-523 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3c, 3d, 3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 14

DATE: 10 November 2020

### LESSON OBJECTIVES

**Experience:** Comprehend the relative effectiveness of the Linebacker I and II bombing campaigns in America's Vietnam War.

**Assessment/Integration:** Comprehend the Vietnam War's implications for airpower theory and practice and the USAF's organizational culture.

### LESSON OVERVIEW

#### AP-524 (S): Bombing Vietnam: Linebacker I and II

**Overview:** This seminar offers students the opportunity to conclude their discussion of airpower and the Vietnam War by examining in detail the linkages between airpower employment and national policy during President Richard Nixon's Linebacker I and II bombing campaigns near the end of the Vietnam War. How effective was airpower in Vietnam? Could it have been used in a different way to produce substantially better outcomes? What are the lessons that we should learn from this experience?

*CONTACT HOURS: 1.5-hour seminar*

### REQUIRED READINGS (63)

3. Mark Clodfelter, *The Limits of Airpower*, 147-210.

### JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)

AP-524 supports the following Joint Learning Areas and Objectives for JPME: 1a, 1c, 2a, 2c, 3c, 3d, 3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## DAY 15

DATE: 12 November 2020

### LESSON OBJECTIVES

**Context:** Comprehend America's relationship with the Middle East starting mainly from the end of the Second World War and ending in 1973 to understand American policy during the Arab-Israeli Wars.

**Experience:** Comprehend the importance of airpower in Israeli national security strategy and the Israeli application of airpower in the Arab-Israeli Wars up to 1973.

**Assessment/Integration:** Comprehend the immediate and lasting implications of the application of airpower in the Arab-Israeli Wars of 1967 and 1973 for airpower theory and practice.

### LESSON OVERVIEW

#### AP-525 (L): America in the Middle East, 1945-1973 (Terino)

**Overview:** This lecture provides an overview of America's relationship with the Middle East in the middle of the twentieth century. The Modern Middle East took shape after the breakup of the Ottoman Empire in the First World War. American interests in the region grew after the Second World War as a consequence of several factors. The importance of oil was a constant theme in American foreign policy and shaped American relations with several Middle Eastern states. The creation of the State of Israel in 1948 led to heightened tensions with the Arab States and a series of wars that greatly impacted American interests. Finally, the Cold War made the United States concerned about Soviet influence in the region, both political, economic, and military. In addition to helping students understand the Arab-Israeli Wars, one cannot understand America's position in the Middle East today without some awareness of the events discussed in this lecture.

*CONTACT HOURS: 1.0-hour lecture*

#### AP-526 (S): Airpower in the Arab-Israeli Wars, 1948-1973

**Overview:** The Israeli Air Force merits attention in this course as one of the world's leading air forces. Historically, airpower has been central to Israeli national security and military strategy. It continues to be one of Israel's most prominent military instruments today. Facing an existential threat after its creation in 1948, Israel saw a need for a military capable of achieving decisive victories against numerically superior opponents. Airpower compensated for Israel's lack of strategic depth and has often been the decisive instrument in its military campaigns. Perhaps no better illustration of this exists than Israel's achievement of air superiority in 1967. At the same time, the Arab States – supported by the Soviet Union – responded to Israel's air capabilities with new air defense systems that seemed to blunt Israel's offensive striking power. The lessons learned from the Arab-Israeli Wars had an immediate impact on the American military as it confronted the new Soviet air defenses in the 1970s and largely reinvented its approach to airpower in the following decades to ensure that it could achieve air superiority. In particular, the Israeli approach focused on airpower missions rather than the application of airpower at different levels of war. This blurring of the lines between “strategic” and “tactical” airpower – a division at the heart of most classical airpower theories – proved enormously consequential for air powers around the

world in subsequent decades, including the United States.

*CONTACT HOURS: 2.0-hour seminar*

**\*FINAL EXAM DUE AT 1700 ON FRIDAY, 13 NOVEMBER 2020 ON CANVAS\***

#### **REQUIRED READINGS (74)**

1. Alan Stephens, “Modeling Airpower: The Arab-Israeli Wars of the Twentieth Century,” in John Andreas Olsen, *Airpower Applied*, 217-285.
2. JP 3-01 Countering Air and Missile Threats, IV-12 – IV-16 (Suppression of Enemy Air Defenses)

Students should consider how Israel’s experience in the Arab-Israeli Wars from 1967-1973 helped lay the foundations of modern SEAD doctrine.

#### **JOINT LEARNING AREAS AND OBJECTIVES (JPME-1)**

AP-525 supports the following Joint Learning Areas and Objectives for JPME: 2c, 3a, 3f, 4f, 6a, 6b, and 6c.

AP-526 supports the following Joint Learning Areas and Objectives for JPME: 1a, 2a, 2c, 3c, 3f, 3g, 4c, 6a, 6b, 6c, 6e, and 6f.

## **APPENDIX: COURSE FACULTY**