

## Technology and Military Organization

INTA 4011/6015

Fall 2018  
Instructional Center 111  
154 Habersham

Professor Salomone

Office Hours: immediately after class is the best to catch me or by appointment

TA: Quintin Gaddy

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Office Hours: immediately before class in 154 Habersham or by appointment in the TA office right next door

### To Contact Me:

I rarely check my GaTech email; the best way to contact me is to email Quintin who can forward requests to my personal email. Please include Dr. Salomone and INTA 4011 in the subject. Quintin is really quick about getting me forwards and can also answer most questions about class materials or administrative matters

### Course Description and Objectives

This course is organized around the concept of Revolutions in Military Affairs (RMAs). RMAs involve significant changes in technology applied to military purpose and corresponding changes in military organization and operational art leading to new conceptions of the way warfare is conducted. Since the time of Napoleon, it is widely believed that there have been several such RMAs (including the development of nuclear weapons which is outside of the purview of this course) and that another is underway at the present time. The nature of these revolutions will be explored through case studies with special emphasis on the evolution of military technology, its impact on military organization, and the nature and role of innovation in these processes.

### Course Requirements

You are expected to attend ALL classes. You are expected to read ALL the assignments in advance of class. This is your “homework”. You are expected to participate in class discussions. Readings outside the texts will be available on T-2. There will be film to assist in the understanding of the case studies. *If you think that film is a waste of time for learning, then you certainly will not want to take this course.*

There will be three examinations during the course and a final examination as required and scheduled by the registrar. The examinations will be multiple-choice. Class participation will be a factor in your grade in that I will reward a class with extra credit points at the end of the course in which attendance and in class participation are high.

### Texts

Martin Van Creveld: Command in War

J.F.C. Fuller: The Conduct of War, 1789-1961

John Keegan: The Face of Battle

### **Learning Outcomes:**

After completion of this course, the successful student will have a working understanding of the manner in which military organizations organize their human capital in response to or in support of technological or organizational innovation, external threats or opportunities, and budgetary feasts or famines.

Students will have demonstrated the ability to:

1. Use historical examples of military innovation to understand the outcomes of major wars and battles;
2. Identify key instances of ‘military revolution’ and their perceived effects on the manner and prosecution of ‘war’; and
3. Understand the connection between politics, conflict, and war from the perspective of key military practitioners and writers in Western military thought, including but not limited to Clausewitz, Moltke, Schlieffen, Fuller, Keegan, and Van Creveld.

### **The Course:**

**Introduction:** Topic: Where we are now. Film: Iraq: Battle Plan Under Fire and “The Revolution in Military Affairs” (RMA) briefing. This material will be included on the final examination. Other examinations are not cumulative.

### **From Whence We Came:**

- 1.0) Warfare in the “Ancient” World. Read Fuller, "The Limited Wars of the Absolute Kings" and "The Rebirth of Unlimited War"; Keegan, "Agincourt 25 October 1415"; Van Creveld, "Introduction" and "The Stone Age of Command"; Films: Selections from “300”, “Brave Heart” and “Henry V”.
- 2.0) Between the Napoleonic Wars and the American Civil War. Read Keegan, "Waterloo, 18 June 1815"; Fuller, "Napoleonic Warfare", “The Theories of Clausewitz”, Film: Selections from “Waterloo”.
- 2.1) Influence of the Industrial Revolution and the American Civil War. Van Creveld, "The Revolution in Strategy" and "Railroads, Rifles, and Wires"; Fuller, “The Influences of the Industrial Revolution”, “The American Civil War 1861-1865”; Film: Selections from “Gettysburg”.

### **Exam #1** (covering 1.0, 2.0, & 2.1)

- 3.0) The Early Twentieth Century. Read Fuller, "Moltke, Foch, and Bloch", "The Roots of Armageddon" part 2 (Military Developments 1870-1903) only, and "The Conduct of World War I"; Van Creveld, "The Timetable War"; Keegan, "The Somme, 1 July 1916”; Films: Selections from “All

Quiet on the Western Front”; “The First World War”; and “Visions of War”.

**Exam #2** (covering 3.0)

- 4.0) Military Innovation Between the World Wars. Read Fuller, "The Twenty Years Armistice" and "The Conduct of World War II"; Film: Selections from “Visions of War” and “Tanks”.
- 5.0) Inter-war Case Studies. Read Stulberg and Salomone, “The German Blitzkrieg Transformation: Rebuilding Preeminence from Catastrophe” and Cohen and Gooch, “Catastrophic Failure: The French Army and Air Force, May-June 1940” (On T-Square); Tami Davis Biddle, “Dresden 1945: Rhetoric and Reality”; Film: “The Bombing of Germany”.

**Exam #3** (covering 4.0 & 5.0)

- 6.0) The Current RMA and the Gulf Wars. Read James R. Fitzsimonds & Jan M. Van Tol, "Revolution in Military Affairs", Joint Force Quarterly, Spring 1994; P. Bracken, "The Military After Next"; Salomone and Crecine, “Information Rich Environments”, T.P.M. Barnett, “The Seven Deadly Sins of Network-Centric Warfare”, Stulberg and Salomone, “Six Maxims” on T-2. Films: “Inside the Kill Box”, General Schwartzkopf’s “Briefing” at the conclusion of ground combat in the Gulf War, February 28, 1991.

**Exam #4 during finals week. NOTE: This exam will include information from the “Introduction” as well as 6.0.** Time and place to be determined by the Registrar.