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Advanced Capability Planners' Course (ACPC) Final Report

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Executive Summary

For nearly 10 years, the United States Government (USG), along with its Institutional Capacity Building (ICB) partner the Institute for Defense Analyses (IDA), has been engaged with the Republic of Indonesia (RI) Ministry of Defense on ICB efforts assisting the RI to improve how it organizes, trains, equips, deploys, employs, and sustains the Indonesian military, Tentara Nasional Indonesia (TNI). IDA originally supported USG efforts through the Defense Resource Management Studies (DRMS) program, led by the Office of the Secretary of Defense's Cost Analysis and Program Evaluation office (OSD/CAPE). Since 2013, IDA ICB efforts have been conducted through the Defense Security Cooperation Agency (DSCA) and the Institute for Security Governance (ISG). During these 10 years of engagement in Indonesia, ICB efforts have been both embraced and shunned by the TNI, depending largely on the attitude of influential Ministry of Defense (MoD) and TNI senior leadership. Beginning in early 2017, MoD senior leaders once again began to embrace improved defense management principles, and with the change of command in the TNI in January 2018, the USG saw substantially increased interest from TNI in ICB and defense management. The Advanced Capability Planners' Course (ACPC) described in this document is a milestone in this most recent ICB effort in Indonesia and represents significant progress in ICB efforts within RI. The ACPC culminates a series of intense efforts since 2017, while foreshadowing substantial future opportunities to engage MoD and TNI in ICB.

This first-ever ACPC led 20 hand-selected MoD and TNI officers through a three-week course focused on the analytical aspects of defense planning and defense analysis, and concluded by focusing on issues associated with creating a capability planning office within the MoD. While most ICB work in Indonesia is funded through US Code Title 10 resources, the ACPC was funded by leveraging the ability of IDA as a federally funded research and development center (FFRDC) to accept US Code Title 22 funding as well, in this case Foreign Military Financing (FMF). IDA's dual funding ability created the unique opportunity for the Office of Defense Cooperation in Jakarta (ODC-Jakarta) to synergize disparate ICB resourcing into a coherent ICB approach leveraging IDA's expertise in-country and in the United States to improve defense planning and analysis in RI.

The ACPC was executed through three main themes related to advanced capability planning: defense planning, defense analyses, and defense administration. Defense planning blocks focused on types of analyses done at the strategy and joint concepts level, while defense analysis focused on more traditional force structure analyses. Defense administration blocks sought to give this cohort insight on how to build their own capability planning office within the MoD.

In preparing and delivering the course, IDA used 17 experts from across five different divisions, representing hundreds of years of experience in working in and researching defense analytic subject areas, to develop 47 ninety-minute modules of material. Much of this material was developed new by IDA for the Indonesian ACPC; that material is now available across the ICB enterprise, advancing our knowledge and instructional capabilities moving forward. The team worked with the Naval Education and Training Security Assistance Field Activity (NETSAFA) during course development to add ACPC development and delivery to the Military Articles and Service List (MASL), streamlining development and delivery of future versions of the course, either in the partner country or in the US; IDA found that, for the Indonesian cohort, hosting the course in the US significantly improved the experience and overall learning environment for the students.

Looking forward, the ACPC represents a starting position for implementing capability-based planning more broadly across the Indonesian MoD and TNI. However, to see this become a reality, the capability planning office must be formally chartered within MoD processes; many more analysts must be trained; and senior leaders within the MoD and TNI must support the concept of enhanced defense management moving forward.

As the RI sets out to improve the TNI and better provide for the defense and security of Indonesia and Southeast Asia, the ACPC represents an important step in the evolution and professionalization of Indonesian defense analytic capabilities. It will take significant effort on the part of the RI, and significant commitment and patience on the part of both the RI and the USG, to ensure that this evolution does not end with the ACPC.

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1. Course Context & Rationale

A. Course Objective

The primary objective of the Advanced Capability Planners' Course (ACPC) was to train a group of Indonesian defense analysts in the tools and techniques necessary to lead defense planning, conduct force structure analysis, and manage a capability planning office. We believe the course met those objectives. Within the broader context of Institutional Capacity Building (ICB) work in Indonesia, the course served as both a capstone to a series of seminars that began in 2017, and a launching point for the next steps in developing a more robust joint planning system and establishing a capability planning office in the Indonesian defense sector.

In this report, the reader will find the following terms and references to the Indonesian defense sector useful:

- Kemhan: Indonesian Ministry of Defense
- TNI: Indonesian Armed Forces
- Strahan: Kemhan Directorate of Defense Strategy
- Kuathan: Kemhan Directorate of Defense Strength
- Renhan: Kemhan Directorate of Planning
- Pothan: Kemhan Directorate of Defense Potential
- Unhan: Indonesian Defense University
- DitMat: Kuathan Directorate of Materiel
- Mabes-TNI: Indonesian Joint Military Headquarters
- TNI-AL: Indonesian Navy
- TNI-AD: Indonesian Army
- TNI-AU: Indonesian Air Force
- Bappenas: Indonesian Ministry of National Development Planning

B. Project Sponsorship

The ACPC project sponsor was the Office of Defense Cooperation (ODC) in Jakarta. The ACPC was created at its behest, with two primary objectives: to create an initial cadre of analysts capable of improving Indonesian defense planning, and to provide a path for establishing a capability planning office within Kemhan capable of leading change in the Indonesian defense planning system. The Institute for Defense Analyses (IDA) was chosen

to develop and deliver the ACPC due to its work in Indonesia dating back nearly 10 years, its position as the Department of Defense's (DOD's) joint federally funded research and development center (FFRDC), and its ongoing relationship with the ODC's ICB program.

C. Course Background

1. Brief history of IDA teams in Jakarta

The IDA-Indonesia institutional capacity-building team has been actively supporting shared US and Indonesian priorities in country since 2012, executing more than $5 million in capacity-building projects over 45+ visits, reaching Kemhan, the Indonesian Services, and Mabes-TNI, as well as other key actors in the Indonesian security sector. IDA personnel have developed and refined a robust body of work over this time on international best practices (IBP) for defense management, including strategy and policy development, joint capability planning (JCP), life cycle management, and joint concepts. At the time of the ACPC, the Indonesia team was operating at an optempo of 6 to 8 two-week trips each year, on average.

As of April 2019, the team had exceeded:

- 2,200 staff days in country;
- 330 major meetings in country;
- 950 hours of seminars and workshops in Indonesia, featuring approximately 470 custom lecture and exercise models; and
- 3,000 engagement points with Indonesian military officers, defense civilians, and other defense thought leaders.

2. Synopses of major seminars preceding the ACPC

a. 2014

- Renhan International Best Practice in Defense Resource Management (DRM) Workshops (February, March, April, and June): This series of workshops exposed Indonesian military planners to IBP concepts using a database for the notional country of Zed. Students learned about JCP through a series of planning exercises, culminating in them building options for improving the Zed military force structure. Participants came from across Kemhan and the Indonesian Armed Forces (TNI).
- Force Oriented Cost Information System (FOCIS) training (April): A small group of Indonesians learned the FOCIS tool to support the work that was occurring in the Renhan workshops.

- Defense Strategic Plan (DSP) Workshop (August): The team worked with Renhan budget planners to implement IBP in developing the 2015-2019 DSP during a Renhan-sponsored offsite workshop in Puncak (a mountain town near Jakarta).

b. 2015

- Defense Strategy Process Mapping, Strahan (June and August): The IDA team and the Ministry of Defense Advisor (MODA) conducted two workshops with Strahan to develop a map of the Kemhan strategy development process.
- Defense Budget Planning Process Mapping, Renhan (June and August): Defense Institution Reform Initiative (DIRI) and MODA advisors conducted two workshops with Renhan to develop maps of the Kemhan defense strategic plan and annual budget development processes.
- Life Cycle Costing, Pothan (April and August): The team conducted two workshops to teach life cycle costing principles to Indonesian planners from across Kemhan and the TNI.
- Defense Management Course, Unhan (November in Monterey): At the request of the ODC, IDA provided the defense management content for a two-week course taught at the Naval Postgraduate School. Attendees were from the Unhan College of Defense Management.

c. 2016

- Bappenas Defense Planning Workshop (July, August, October): This series of workshops exposed Indonesian defense and security planners at Bappenas to IBP concepts in defense management. Content focused on the role of Bappenas in strengthening defense planning in Indonesia, and exposed planners to the power of the FOCIS tool from a planning and budget perspective.
- Defense Strategy and White Paper Workshop with Strahan (November): At the request of Kemhan, the IDA team provided a workshop on developing strategy and the role of white papers in defense planning.

d. 2017

- Basic Capability Planners' Course (BCPC) with DitMat Kuathan (Initial run; April, May, July, September): This course introduced Kemhan personnel to basic concepts in defense management and joint capability planning and served as a mechanism to identify top students best suited for advanced work in this area. Please see BCPC section below for a full description of this course.

- Strahan/Anstra Defense Strategy Seminar (May, July, August, September): This seminar series presented a group of military officers and defense civilians from Kemhan's strategy office with an introduction to key aspects of defense management and best practices for fitting the strategy process within larger defense planning efforts. The series was comprised of four three-day sessions: Session 1: Strategic Assessment; Session 2: Planning Scenarios; Session 3: Strategy Development; and Session 4: Connecting Strategy to Planning.
- Life Cycle Management (LCM) with the Indonesian Army (TNI-AD) and Air Force (TNI-AU) (August, November): This six-day workshop included an overview of LCM as a process and introduced key LCM concepts, including systems, infrastructure, and support management, to a group of O-4s, O-5s, and O-6s from the Indonesian Army and Air Force. Participants learned about the conceptualization, preparation, procurement, commissioning, sustainment and support, and decommissioning phases of LCM; the elements of a good life cycle sustainment plan; and the structure of a well-organized LCM office.

e. 2018

- TNI-AL Workshops (January, March): The Indonesian Navy workshops focused on operational design and planning (Workshop 1) and force requirements and force availability (Workshop 2). Each four-day session combined lecture and exercise modules and featured presentations from both the US team and the Indonesian participants. Major topics explored included designating priority operating areas; developing operational approaches and concepts; determining adjusted force requirements and force generation capacity; force allocation; risk and resource decision-making; and assessing new naval capabilities.
- Introduction to Joint Concepts Workshop (July): This half-day seminar introduced Service personnel from each branch (assigned to Indonesian joint headquarters (Mabes-TNI)) to the basics of defense management; the history and evolution of joint in the US and North Atlantic Treaty Organization (NATO) context; and the nature and role of joint concepts in a modern military.
- Basic Capability Planners' Course (Second run; July, October): This course introduced a new group of Kemhan personnel to basic concepts in defense management and JCP and served as a mechanism to identify top students best suited for advanced work in this area. Please see BCPC section below for additional details.

f. 2019

- Basic Capability Planners' Course (continuation of second run; February): Please see BCPC section below for additional details.
- Advanced Capability Planners' Course (March): The subject of this paper.
- Joint Concepts Workshop with Mabes-TNI (August, TBD): This series dives deeper into joint concepts from the perspective of IBP. Major topics of discussion in the first session include the role of joint concepts in defense management; US and Indonesian approaches to joint; establishing a country's joint missions; and the relationship between operational approaches and joint concepts. This series is expected to run through the first quarter of FY20, with the first session in August 2019.
- Life Cycle Management with TNI-AU, TNI-AL, and TNI-AD (September, TBD): As of this writing, a new line of effort was also in development on life cycle management with all three Indonesian Services, sponsored by Mabes-TNI. This series is expected to begin in January 2020 and run through August of that year. Introductory sessions will be conducted as one large group, while more advanced material will be delivered in two tracks, one for aviation and another for ships.

3. Overview of Basic Capability Planners' Course (BCPC)

The BCPC, and ultimately ACPC, were born from the determination that Indonesia has no defined joint planning system (JPS) for linking their warfighting concept to joint force management (the process for assigning ready forces for employment by a joint force commander), and ultimately to joint capability planning. In the absence of JCP, the individual services aim to amass a certain number and combination of desired platforms. This minimum desired force level is articulated in the Kemhan-produced "Minimum Essential Force" (MEF) document, which is part of the "Postur" (e.g., force posture) document produced during the strategy development process. The MEF is a service-centric, financially unconstrained force planning document used to justify future weapons purchases. During scoping and assessment of Indonesian defense management processes, the IDA team determined that to build a JPS, first Kemhan would have to value the role of capability planning, while simultaneously appreciating that no JPS would ever work without the introduction of joint concepts into Indonesian military operations.

The primary goal of the BCPC was to introduce JCP at the planner level, such that planners could describe to their bosses across the TNI and Kemhan the potential of JCP to strengthen the Indonesian defense planning systems. The ACPC was designed as the second phase of training. While the BCPC focused predominantly on the processes of JCP,

the ACPC would focus on the skills an analyst needs to perform analyses within an improved defense management system.

a. First Run

The first BCPC was delivered in four three-day sessions held in April, May, July, and September 2017. The majority of the approximately 40 attendees came from Kuathan, with some from places including Baranahan, Strahan, and the Army, Navy, and Air Force headquarters. The April session introduced defense management; defense strategy, planning scenarios, and risk; joint concepts and operations; capability-based planning; readiness and planning data; cost analysis and life cycle cost; and the Force-Oriented Cost Information System (FOCIS). In May, attendees learned more about capability-based planning, including how to develop capability planning guidance; how to conduct mission area assessments and capability gap analyses; and how to derive capability planning options and proposals from that work. The course schedule for the first two sessions is shown in Figure 1.

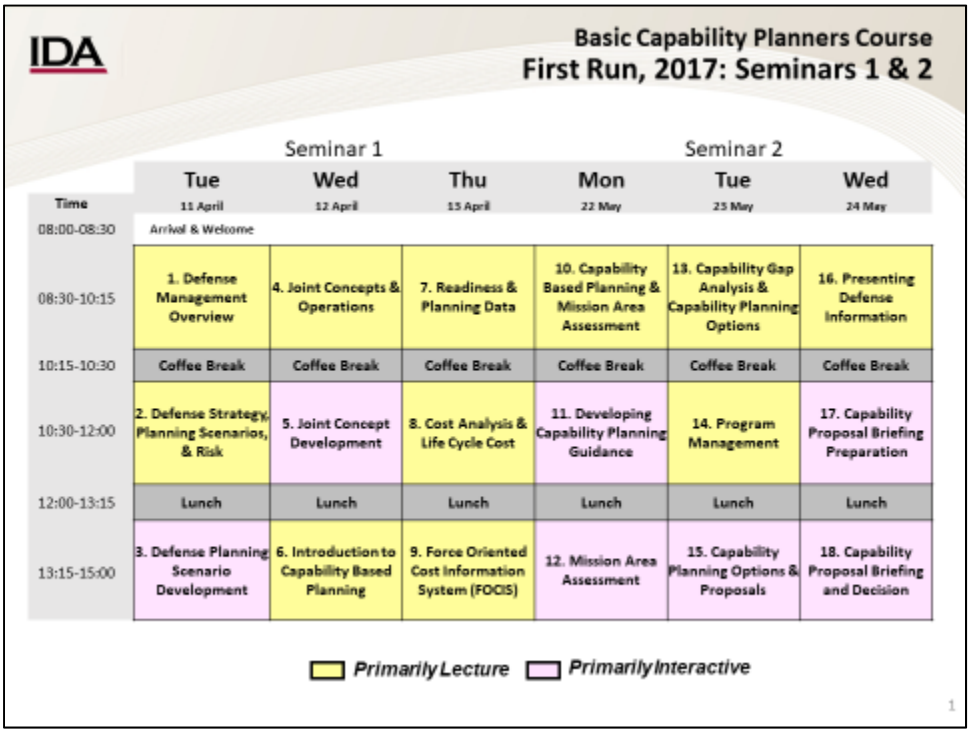

Figure 1. BCPC First Run Schedule, Sessions 1 & 2

The third session in July reinforced earlier work on capability planning and mission area assessment, with a mostly interactive workshop allowing participants to interpret examples of capability planning guidance for a fictional country, do their own mission area assessments, and create and evaluate capability planning options and proposals. Session three concluded with an introduction to defense programming and a cost spreadsheet tool

that can be run in Microsoft Excel. The final session in September centered on running a defense programming simulation, culminating with group outbriefs of program proposals developed by the participants. The schedule for the final two sessions is shown in Figure 2.

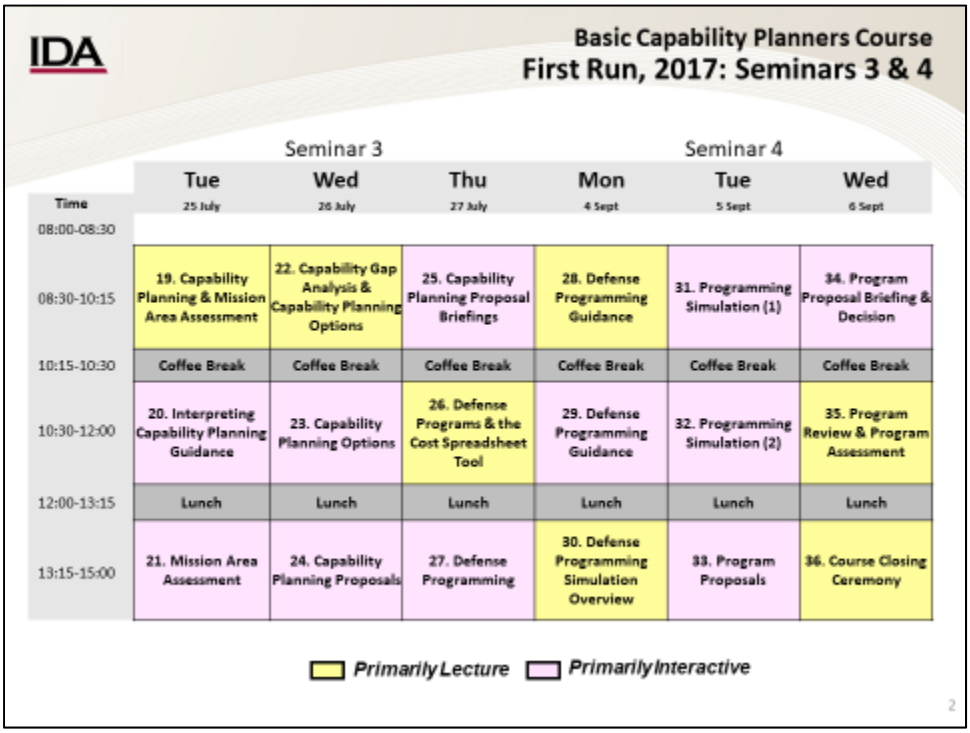

Figure 2. BCPC First Run Schedule, Sessions 3 & 4

b. Second Run

The need to run a refresher session of the BCPC became evident as the core group of planners from the first session shrank and the time between the BCPC and ACPC extended. The second course was reorganized and focused on orientation to JCP by building on the first course. Most of the new students added to the remaining students from the original group had participated in other ICB-related training led by the IDA team, so they came to the BCPC with a basic level of understanding of joint capability planning.

Applying new thinking on core subjects and lessons learned from the first run of the course, the IDA team revised and reorganized the original course materials into three streamlined sessions held in Jakarta in July 2018, October 2018, and February 2019. The participant selection process was also overhauled to ensure that those attending were a better fit in terms of interest/aptitude for doing the work and the relevance of their specific assignments/roles in their home offices. Ten of the top performers from the first course joined the second iteration as well, serving as resources for the rest of the students (with

all continuing on to the advanced level together). The full schedule of the 2018-2019 BCPC is shown in Figure 3 through Figure 5.

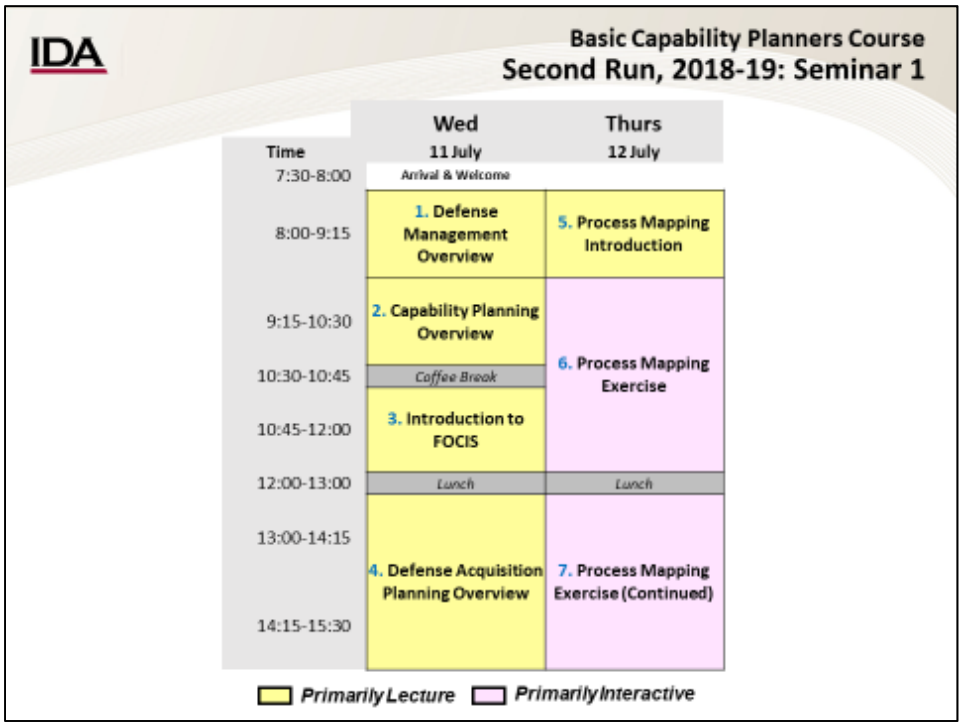

Figure 3. BCPC Second Run Schedule, Session 1

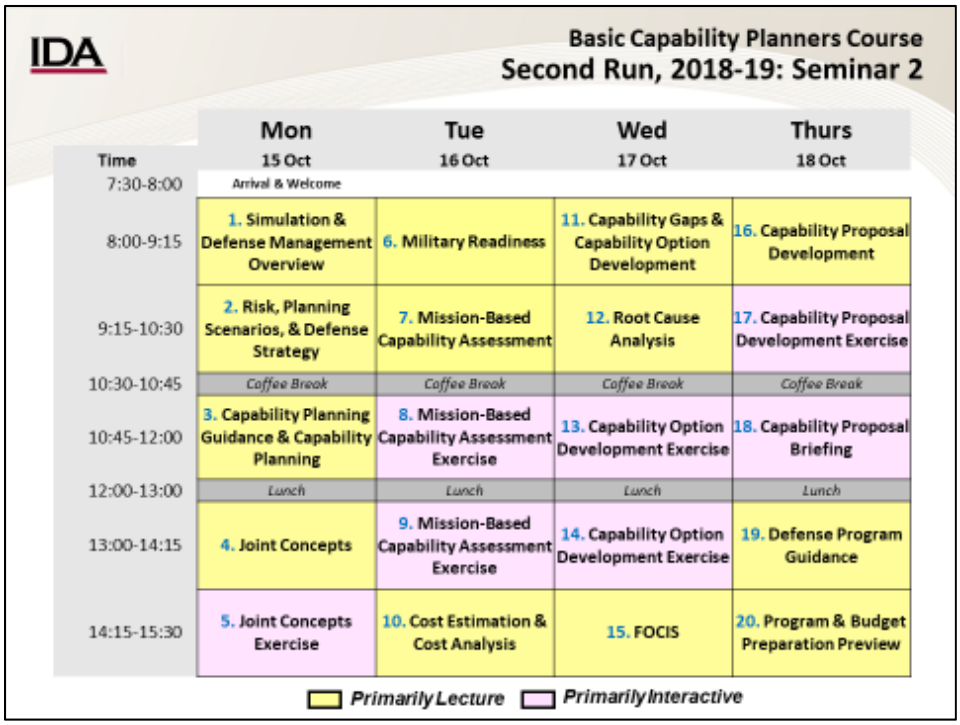

Figure 4. BCPC Second Run Schedule, Session 2

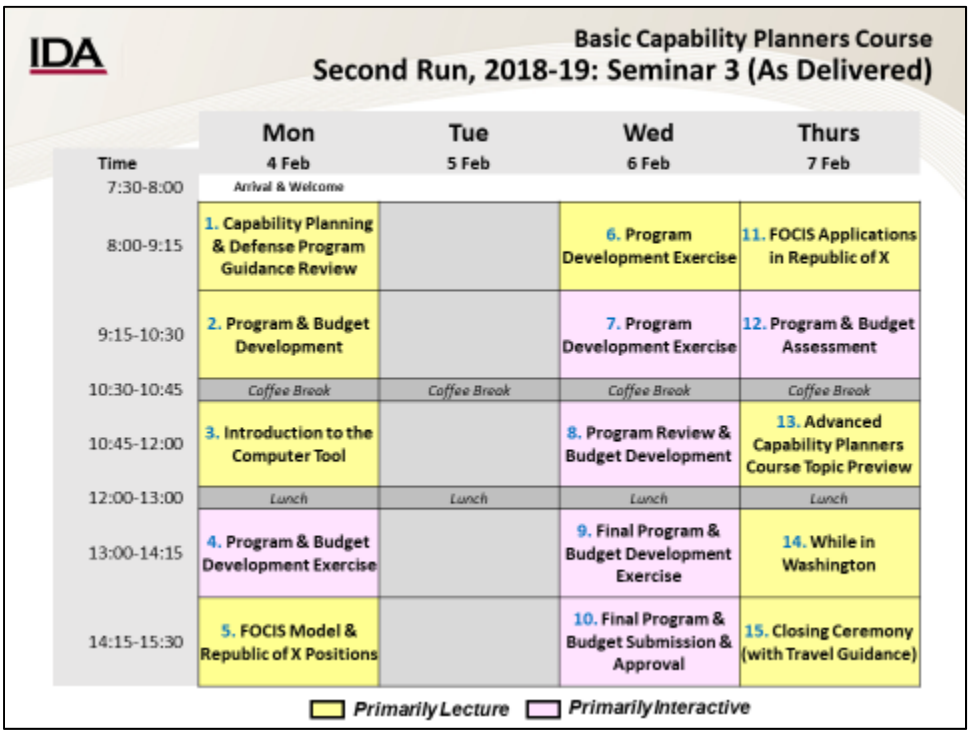

Figure 5. BCPC Second Run Schedule, Session 3

D. ACPC Concept Development

As the team gained knowledge of the Indonesian planning system over time, it became apparent that human talent would be a limiting factor in implementing joint capability planning within an overall joint planning system in Indonesia. The ACPC was conceived as a way to bridge the human talent gap by creating a group of analysts familiar with both the work necessary in a JCP system and the knowledge needed to create and staff a capability planning office. The core group of analysts were selected from across the Indonesian Ministry of Defense (Kemhan), joining two participants chosen from each of the Services and the joint headquarters (Mabes TNI). This ensured that knowledge of this work was widely disseminated across Indonesia's defense institutions from the beginning and created a network of newly trained analysts across the entirety of the defense sector.

1. Precedent

In 2015, responding to a request from the ODC in Jakarta, the IDA team developed and presented a two-week course on defense management to a cohort of 27 students, staff, and others from the Indonesian Defense University (Unhan). The 2015 Defense Management Course was delivered at the Naval Postgraduate School (NPS) in Monterey, CA, with logistical and other support from NPS' Center for Civil-Military Relations

(CCMR).[1] Custom-built course modules introduced students to IBP related to five core defense management domains: 1) strategy and policy; 2) resource management; 3) human resource management; 4) logistics; and 5) joint concepts and operations. According to post-course surveys, nearly 75 percent of participants felt that the quality of the course was excellent, and approximately 85 percent strongly agreed that the course had improved their knowledge.[2]

Following the 2015 Defense Management Course, both the sponsor and the IDA team believed there was potential to augment and update the original material in line with lessons learned from the Monterey experience, and to deliver an improved version of the course to future cohorts, either in installments overseas or during a multi-week period in the United States, depending on funding and other circumstances.

In 2017, as Kuathan began to seriously contemplate establishing a capability planning office within their Directorate of Materiel (DitMat), it became clear that the analysts who would staff such an office would need a more intensive education in the subject than could be effectively delivered three days at a time on IDA team visits to Jakarta. In addition to the limited amount of time for instruction and constraints on team size/composition, holding these events in Jakarta left participants subject to the demands of their bosses and inevitable urgent developments that often pulled them away from a full three days in class.

With the 2015 course in mind, the IDA team lead proposed to the ODC chief a similar effort to be held in the US, this time focused on preparing defense analysts, building on the basic instruction in defense management and capability-based planning that had already taken place with Kuathan in Jakarta. The new course would support US security cooperation objectives and country team priorities, including professionalization and modernization of the Indonesian Services and Kemhan; allowing Title 10 and Title 22 funding to reinforce each other in pursuit of shared goals with a major US partner in Indo-Pacific Command (INDOPACOM); consolidating and building on knowledge already delivered in in-country engagements; getting the cohort out of its usual environment and away from distractions, creating powerful team-building opportunities; and providing a powerful incentive for Kuathan to actually create and staff the defense analytic office it had been considering. After discussions with ODC staff and others on the country team, the ODC chief agreed to support the development and delivery of the course at IDA as blanket order training (BOT) under a Foreign Military Sales (FMS) case.

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[1] Now the Institute for Security Governance (ISG).

[2] For more on this course, see Patrick A. Goodman, Shaun K. McGee, William R. Mahoney, Wade P. Hinkle, and Aaron C. Taliaferro, *Defense Management Course, Office of Defense Cooperation, Jakarta 9-20 November, 2015,* IDA Document D-5729, (Alexandria, VA: The Institute for Defense Analyses, March 2016).

E. Task Order & Task Structure

Once approval for the course was given by Embassy Jakarta's ODC Chief, a proposal was submitted and agreed to, with course funding split into two tranches at the request of the ODC. The first pot of money paid for course development, and the second paid for course delivery. Splitting the funding into two increments increased administrative costs slightly but allowed the ODC the spending flexibility it desired. The BOT money from the ODC came directly to IDA on a task order, with coordination and dispersal assistance from the Naval Education and Training Support Field Activity (NETSAFA).

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2. Course Development

One significant planning consideration of the ACPC was to hold the course at IDA headquarters near Washington, DC. This served two purposes: allowing more IDA research staff members to participate in the development and delivery of the course, and exposing students attending the course to the United States through field studies activities. In all, 17 IDA faculty members participated in course development and delivery, along with contributors from other DOD organizations in the DC area.

A. Course Rationale & Course Development

The advanced course was designed to delve deeper into the topics introduced in the basic course, teaching not just the "what," but the "how" in an attempt to prepare the participants to take on new roles as defense analysts. A core group of IDA Indonesia team members led the ACPC course design effort, orienting the syllabus around weekly themes; Week 1 focused on defense planning, Week 2 on defense analysis, and Week 3 on defense administration.

After developing the broad course outline, the core team pulled together potentially relevant existing materials from sources including the 2015 Monterey Defense Management Course; other seminars delivered in Indonesia; and work done by other IDA institutional capacity-building country teams. Some of this material was adapted, updated, and expanded for use in the ACPC. This was an explicit request of the ODC, meant to keep course development costs low. Where no suitable existing material could be found, IDA subject matter experts (SMEs) created new products specifically for this course. In some cases, new material built on introductory-level modules delivered during the basic course; in others, it introduced the participants to topics that were new to them. The content creation and course delivery effort brought together more than 17 SMEs from 5 IDA divisions and varied analytical backgrounds. For a full list of major contributors, please see Appendix G.

The course schedule was structured to contain a mixture of lecture blocks, interactive modules, guest speakers, and field studies activities each week. Each day was broken into four 90-minute blocks, with instruction beginning at 0830 and ending by 1630, including two 30-minute coffee breaks plus an hour for lunch. Fridays were half days, with the course concluding by 1200 to accommodate participants who wished to attend Friday prayers at a local mosque.

B. Course as Delivered

Figure 6 through Figure 8 show the ACPC as delivered in March 2019.

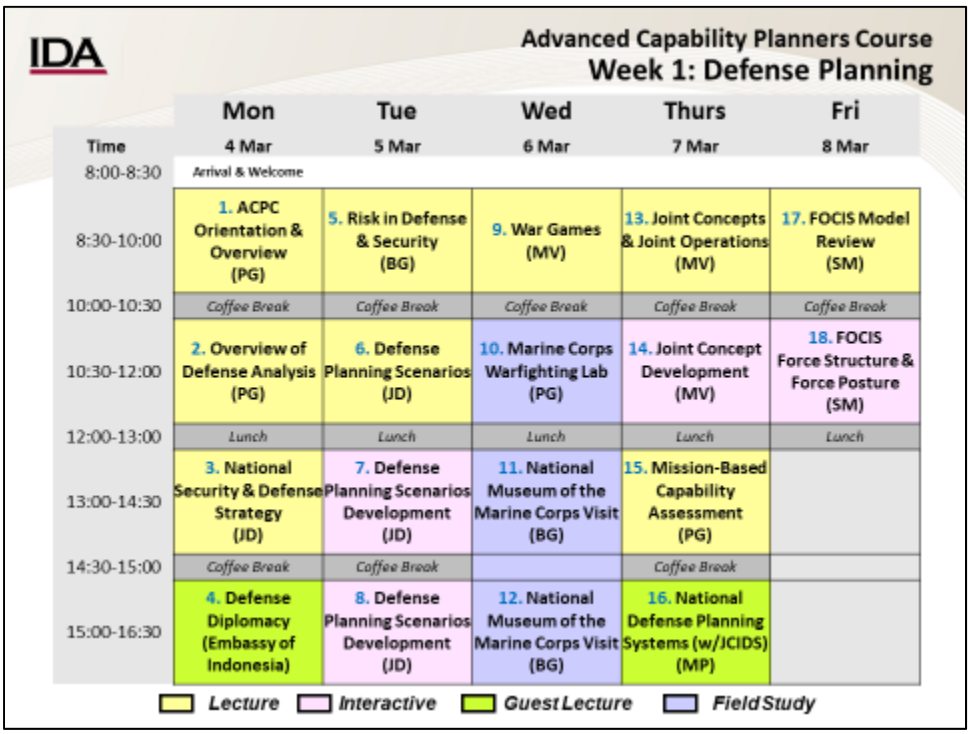

Figure 6. ACPC Week 1, Defense Planning

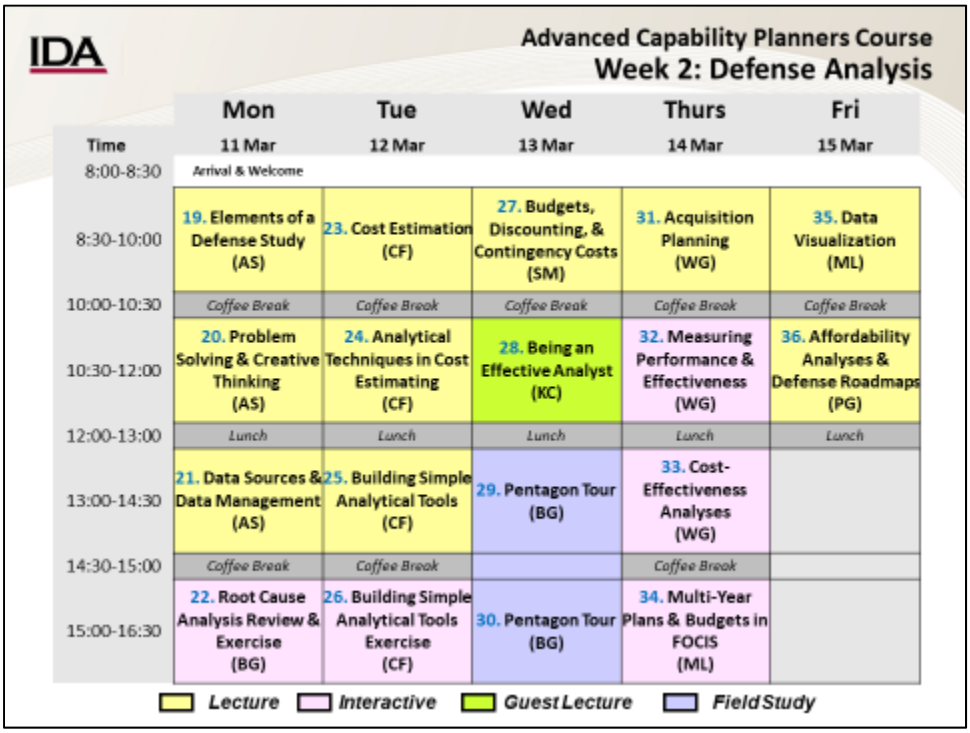

Figure 7. ACPC Week 2, Defense Analysis

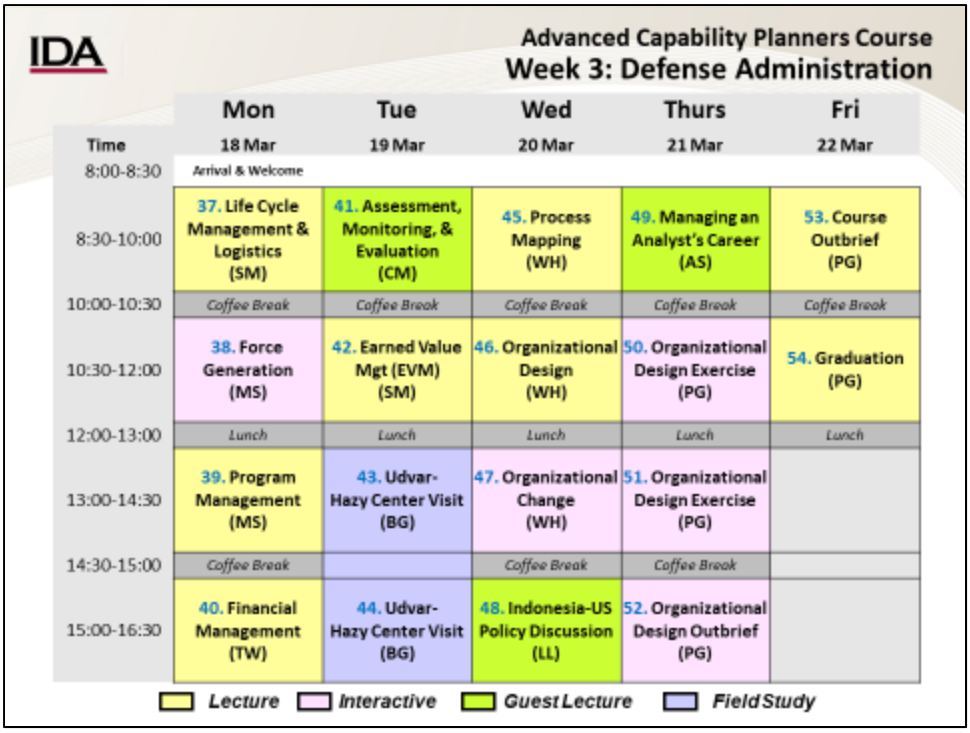

Figure 8. ACPC Week 3, Defense Administration

C. Military Articles & Services List (MASL) Development

The IDA team worked with NETSAFA to obtain a series of MASLs that would cover course content development and delivery and facilitate paying for the course. Having course development and delivery MASLs listed in the Defense Security Cooperation Agency's (DSCA's) Security Assistance Network (SANweb) system allows any ODC or other security cooperation payer to easily contract with IDA for course development (on any topic); course execution of ACPC at IDA as FMS/BOT; and/or ACPC course execution as International Military Education and Training (IMET) anywhere in the world.

Table 1. Overview of ACPC MASLs

MASL Number	Description
P366040	Curriculum development by IDA
P129188	Delivery of resident course at IDA HQ
P319288	Delivery of course overseas as IMET

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3. Course Delivery

A. Facilities & Logistics

IDA and the ODC each handled different aspects of course logistics and planning. IDA had chief responsibility for arrangements related to course execution, with the ODC handling logistics related to participant travel, lodging, and expenses. Among IDA's responsibilities were:

- Securing venues for course lectures, group work sessions, and field studies trips;
- Planning for participant needs, including suitable meals/refreshments and a Muslim prayer room at the course site;
- Coordinating participant transportation between the hotel and the course venue each weekday, and to and from the airport at the beginning and end of the course;
- Providing simultaneous translation of all course sessions and field studies activities, as well as language assistance at the hotel and during off-hours in the Washington area;
- Ensuring all Indonesian ACPC participants and visitors complied with IDA and US government security requirements throughout the course; and,
- Coordinating with the Indonesian Embassy in Washington on opportunities to be involved in the course and otherwise engage with the participants.

The ODC had the participants stay at the Marriott Residence Inn Arlington Pentagon City, located at 550 Army Navy Drive in Arlington, VA. The hotel is approximately a 10-minute drive from the course venue at IDA headquarters. Round-trip course transportation was provided daily by IDA shuttle buses. In addition to making the hotel arrangements, the ODC also coordinated the participants' air travel and arranged for per diem during the course. Participant travel, lodging, and per diem were paid for with BOT funds.

B. Pre-Test

One of the first orders of business on Day 1 of the ACPC was a pre-test given to establish a baseline of participant knowledge related to the course's major topic areas. This baseline, when compared to an identical exam given at the end of the three-week course,

was intended to allow the team to gain a sense of the effectiveness of instruction and any specific topic areas in need of special attention going forward.

To create the test, each presenter developed one to three questions of moderate difficulty from each of his or her modules, with a focus on key concepts and takeaways. A 36-question pre-test was compiled, translated into Bahasa Indonesia (the Indonesian language), and delivered to participants via trackable SurveyMonkey email invitations. The same questions were shuffled and sent to participants on the final day of the course as a post-test. The full bilingual text of these questions and answers is available in Appendix G. For an analysis of participant scores on both tests, please see Section 3.F.

C. Week 1: Defense Planning

The first week of the ACPC established the course logic and context, and delved deeply into the early stages of JCP, including the types of strategic analyses that inform JCP, as well as the joint concepts and joint planning necessary to underpin future capability decisions. A day was spent introducing joint warfighting and war gaming, including a presentation from the Marine Corps Warfighting Lab. The week ended with training on the FOCIS model and how such analyses can also inform JCP.

1. Module 1: ACPC Orientation and Overview

The first course module, or block, was designed to welcome participants to IDA and orient the participants to the course venue, logistics, and daily/weekly routines. Senior IDA leadership from the Strategy, Forces, and Resources Division (SFRD) opened the ACPC during this block. Important information was also transmitted on topics including the course schedule, transportation, field studies activities, meals, prayer room facilities, and emergency procedures.

2. Module 2: Overview of Defense Analysis

In this block, project lead Patrick Goodman took participants through a refresher on core defense management concepts and a broad overview of defense analysis that focused on exploration of the role of analysis and analysts in the wide range of topics that would be featured during the full three-week course.

3. Module 3: National Security and Defense Strategy

In Module 3, Dr. Jason Dechant explored a wide range of analytic topics related to defense and national security strategies, including the context for strategy development; differences across national, ministerial, and functional level strategies; key information to include in a strategy document; and best practices for the strategy development process. Dr. Dechant presented a theoretical introduction to these topics,

fleshed out with real-world examples and placing strategy work within the larger defense planning context.

4. Module 4: Defense Diplomacy (Embassy of Indonesia)

This guest lecture from the Indonesian Defense Attaché to the US reviewed highlights of US-Indonesian military and defense cooperation and created an Embassy opportunity to engage with the ACPC participants toward the start of their stay in the United States. The question-and-answer period following this briefing covered topics including the Indonesian attaches' experiences serving in their diplomatic mission to Washington, as well as participants' practical concerns related to their time in the US.

5. Module 5: Risk in Defense and Security

Brittany Gregerson began Module 5 with a general overview of core concepts related to risk, including risk as hazard, opportunity, and uncertainty; how to calculate risk; how to compare risks; and risk attitudes and appetites. In the second part of Module 5, she explored risk in the defense and security context, specifically examining strategic risk, mission and operational risk, program/project risk, and risk in defense analyses. Ms. Gregerson ended this block with an introduction to risk management, detailing the stages of a basic risk management process; the nature of controls; and how one might get started addressing defense and security-related risks, once identified.

6. Module 6: Defense Planning Scenarios

In Module 6, Dr. Dechant introduced participants to the nature, key components, development, and uses of defense planning scenarios; their relationship to other planning documents; and their role in capability analysis. This block also covered design, development, and management of scenario sets.

7. Modules 7-8: Defense Planning Scenarios Development Exercise

Building on content delivered in Module 6, this interactive block took participants through the scenario set development process. In groups, participants populated a scenario set matrix template with information including threat types, domain/terrain, and locations important to Indonesia (as reflected in strategic guidance). Groups then brainstormed 3-4 potential defense planning scenario topics and mapped them to the scenario set matrix; once complete, this was assessed for comprehensiveness to address the full range of threats, domains, and geographies highlighted in the strategic guidance.

Following a break, the teams reconvened for the second half of the exercise, in which they outlined and developed a single Indonesia defense planning scenario from their

previously established set. Teams identified primary uses for the scenario and the related analytic questions; identified key scenario components, given intended application; and developed core scenario components, and other components, as feasible. At the end of the day, teams outbriefed both their scenario set from the Module 7 exercise and their fleshed-out scenario from Module 8.

8. Module 9: War Games

Presenter Mark Vinson's block on war games took participants through the history, purpose, and nature of such activities in the US defense and military contexts; the details of the war game development and execution process; the wide array of forms that war gaming can take; and the use of war games in defense strategy, planning, and policy making, as well as evaluation of the above. In addition to introducing this key defense analytic tool, this block provided important background information to participants in advance of the day's field studies visit to the Marine Corps Warfighting Laboratory.

9. Modules 10-12: Field Studies Visit: Marine Corps Warfighting Lab & National Museum of the Marine Corps

The Week 1 field studies excursion took participants to the National Museum of the Marine Corps, where they received a special presentation from the Marine Corps Warfighting Lab on the nature of their organization and their war gaming activities. Following lunch at the museum, participants toured the museum's interactive exhibits.

10. Module 13: Joint Concepts and Joint Operations

Module 13 sought to introduce participants to the nature of joint concepts and the joint concept development process, as well as the role of joint concepts in capability planning and defense management more broadly. Theoretical material was discussed alongside real-world examples of good joint concept guidance from the US and UK. An in-depth example at the end of this block focused on Indonesia and the maritime environment.

11. Module 14: Joint Concept Development Exercise

Building on the information presented in Module 13, this exercise challenged participants to develop input to a draft Indonesian joint concept for maritime security. In four groups assigned to different geographic areas, participants reviewed provided strategic guidance and information on the operational environment, using this to fill out a joint concept template. Fields included key challenges, tasks, CONOPS summary, and task assignments. Following the exercise, each team briefed their draft

concept and the larger group discussed differences in approach and content to reinforce learning objectives.

12. Module 15: Mission-Based Capability Assessment

In Module 15, Mr. Goodman presented a detailed look at mission-based capability assessment, building on participants' previous exposure to this topic during the BCPC. Major topics of discussion included the components and utility of the mission area assessment worksheet, and a comparison of mission assessment and capability assessment and where each fit into the defense planning model and capability planning process. This module also included a brief exercise in which participants were provided with a defense strategy, capability planning guidance, and a joint concept and tasked with designing the supporting joint capability areas and functional areas.

13. Module 16: National Defense Planning Systems (w/JCIDS)

This guest lecture from Mark Philips provided an overview of US national defense planning systems and their role in capability development. Drawing upon his experience working in the Pentagon, Mr. Philips discussed both IBP for such systems and the US experience, with a particular focus on the Joint Capabilities Integration and Development System (JCIDS), a high-interest topic among the participants.

14. Module 17: FOCIS Model Review

In Module 17, Shaun McGee reviewed with participants the Force-Oriented Cost Information System (FOCIS), an IDA-developed software tool created to model any nation's armed forces' structure and then allow users to explore defense planning, programming, budgeting, and cost analyses at a detailed level. The ACPC cohort had been exposed to FOCIS during the BCPC and in other previous engagements in Indonesia; this module served as a review to prepare participants for further such work during the advanced course. FOCIS is used in several countries around the world to aid planning. IDA provides the software tool as US government-furnished equipment through a license between IDA and the US government.

15. Module 18: FOCIS Force Structure and Force Posture Exercise

Having reviewed FOCIS with the participants in the previous module, for Module 18 Shaun McGee led a FOCIS exercise bringing together core concepts from across the first week of the course. In teams, participants were tasked with familiarizing themselves with guidance documents and a pre-established FOCIS position for a fictional country and military, using these resources to explore how joint concepts

and mission-based capability assessments relate to unit structure, programs, and budgets.

D. Week 2: Defense Analysis

Week 2 of the ACPC was designed to build an analytic foundation in force structure analyses as it relates to JCP. The modules selected not only supported JCP implementation in Indonesia, but were critical to the basic knowledge and skills of any defense analyst. The tools taught in these modules can be used in any defense planning system at any time (even when there is no planning system), but are particularly well suited to JCP.

1. Modules 19-21: Conduct of Defense Analysis and Studies

Dr. Al Sweetser kicked off the Defense Analysis week with three modules exploring the nature and utility of defense studies and the key analytical concepts, techniques, and tools required for their successful completion. Major topics of discussion included best practices for working with data and models; conducting risk, decision, requirements, and portfolio analysis; characteristics of good analysts and good analysis; problem solving and creative thinking; and communicating study results to stakeholders. Dr. Sweetser also provided his personal perspective on defense analysis from the vantage point of his 30-year career in the military and federal civilian service.

2. Module 22: Root Cause Analysis Review & Exercise

Module 22 reviewed and expanded on previous work Brittany Gregerson completed with the ACPC participants in Jakarta during the BCPC and other earlier engagements. Following a refresher briefing on core concepts in root cause analysis, including key definitions and principles, types/categories of causes, and basic methodology, Ms. Gregerson led a two-part team exercise. The first part of the exercise, a brainstorming competition, divided participants into three groups by Service; each group was assigned a unique readiness problem and given 20 minutes to brainstorm as many potential causes of that problem as they could, reporting their results to the full group at the end of that time period. In the second half of the exercise, each team used the 5 Whys technique and their respective brainstorming results to construct two potential cause-and-effect chains that could plausibly explain the problem initially assigned to the group, in each instance ending by identifying a root cause.

3. Module 23: Cost Estimation

In Module 23, participants considered the meaning of cost; the purpose and goals of cost estimation; best practices for conducting cost estimation; the nature of cost

drivers, cost factors, and other related concepts; and how cost estimation can benefit and inform defense analysis.

4. Module 24: Analytical Techniques in Cost Estimating

Building on information presented in the previous module, Module 24 explored two specific areas of defense and security analysis where cost estimation is frequently used: life cycle costing and operations and support costs. In addition to these case studies, participants used FOCIS to complete an exercise estimating yearly operations and support costs for an exemplar military unit and developing a related unit cost estimating spreadsheet tool.

5. Modules 25-26: Building Simple Analytical Tools Exercise

After having participants themselves build an analytical tool at the end of Module 24, presenter Chuck Fletcher shifted perspective in Module 25, exploring the rationale behind building such analytical tools; the nature of useful ones; and some examples of the kind of models that participants may find beneficial to their work. In Module 26, participants were tasked with selecting a cost estimate, process, or concept to model; sketching it; developing a list of the key factors to consider and data needed; describing how the cost estimate, process, or concept could be modeled; and beginning to build the model/tool itself.

6. Module 27: Budgets, Discounting, and Contingency Costs

Module 27 centered on an analytical case example exploring the process by which, after an unexpected event takes place during budget execution, 1) senior leaders evaluate whether a military response is warranted; 2) military planners develop and propose potential responses; 3) senior leaders choose how, if at all, to operationally respond; and 4) managers request resources to support the selected response. Presenter Shaun McGee took the participants through a 10-step process for developing a model to address such a situation, ending the block with a discussion of how a situation like the case example might materialize in present-day Indonesia, and how people there might respond.

7. Module 28: Being an Effective Analyst

In this guest lecture and mentoring session, Kathy Conley discussed her career as a defense analyst in the US Air Force and federal civilian executive service. Female officers and civilians are significantly under-represented, if not absent, in many parts of the Indonesian Ministry of Defense (MoD) and military and are under-utilized in defense planning. Highlighting a female analyst here with both successful military and analytic careers was intended to draw attention to this issue.

8. Modules 29-30: Field Studies Visit: Pentagon Tour

The field studies trip for Week 2 was a group tour of the Pentagon.

9. Module 31: Acquisition Planning

Module 31 took participants through a detailed overview of acquisition planning and decision analysis processes and their relationship to capability gap identification and gap filling, in circumstances where materiel solutions are appropriate. This block included theory, as well as three real-world case studies on an airborne tanker, cargo and troop airlifter, and maritime craft.

10. Module 32: Measuring Performance and Effectiveness Exercise

Building on the material presented in Module 31, in this exercise Dr. Bill Greer led participants through an exploration of measures of performance (MOPs) and measures of effectiveness (MOEs); their significance in the acquisition context; the processes for identifying appropriate and measurable ones; and how to review instances of their use.

11. Module 33: Cost-Effectiveness Analyses Exercise

Module 33 explored how to organize and conduct cost effectiveness analyses (CEAs), including how to build a CEA study plan and structure an analysis of alternatives. Participants used the MOEs developed in Module 32 as a starting point for this exercise, combining them with cost information to produce observations and recommendations for the acquisition program of the fictional Republic of X.

12. Module 34: Multi-Year Plans and Budgets in FOCIS Exercise

FOCIS expert Maggie Li used Module 34 to take the participants through a live FOCIS demonstration centered on creating and editing multi-year plans and budgets. This work built on earlier FOCIS engagements conducted by Ms. Li and Shaun McGee in the ACPC, as well as in prior engagements with the participants in Indonesia.

13. Module 35: Data Visualization

In Module 35, Ms. Li presented on best practices for data visualization and communication of analytical findings, linking this more general material to FOCIS report data on fuel utilization in the second, interactive half of this block. Participants walked through a step-by-step process, beginning with exporting FOCIS data to Microsoft Excel, and ending with a high-quality product suitable for delivery to a decision-maker.

14. Module 36: Data Visualization Part 2

In the final module of Week 2, Mr. Goodman recapped the major topics of the week, highlighting the importance of data visualization to defense analysis and taking participants through a series of real-world examples of good analysis and data visualization produced by Indonesian groups during previous engagements.

E. Week 3: Defense Administration

Week 3 of the ACPC imagined the process necessary to establish a capability planning office, and what new planners would need to know to build the organizational structure and staff of that office, if one was established in the future. The overall ACPC premise was that the Indonesians need three critical elements to implement JCP: a joint capability planning process, knowledgeable joint capability planners, and a ministry-led joint capability planning office that is incorporated into current or future processes. Week 3 focused on the capability planning office part of that premise.

1. Module 37: Life Cycle Management and Logistics

Module 37 explored the nature and importance of life cycle management (LCM) to modern militaries. Major topics of discussion included the standard LCM model; benefits of a phased approach to developing LCM capacity; the nature and value of integrated system support concepts; the process for constructing integrated system support concepts for specific sustainment requirements; and the merit of the weapon system manager as a fundamental agent of LCM. This block also included a brief exercise evaluating alternative support concepts for C-130 operations.

2. Module 38: Force Generation Exercise

In Module 38, retired Rear Admiral Mike Smith led the participants through an overview of force generation, including the factors that shape force generation capacity; how to understand current force capability; and how to maximize force availability. RADM Smith presented the US Navy Optimized Fleet Response Plan (OFRP) as an example of a well-designed force generation process and combined it with a sample (notional) Navy asset to demonstrate best practice force generation methodology. In the exercise, participants explored various aspects of the model, including cycles for maintenance, training, deployment, and sustainment.

3. Module 39: Program Management

Module 39 built on earlier work with the ACPC participants on program management, exploring further how a country might develop and install functional capability managers and/or weapon system managers to run LCM efforts across the military

Services. RADM Smith presented these concepts through a notional case study using data from the fictional Republic of X.

4. Module 40: Financial Management

Tim Wojtecki introduced a new topic in Module 40, which took a broad look at financial management from both a general organizational perspective and the vantage point of a Ministry of Defense. For case studies, Mr. Wojtecki provided an overview of the US DOD approach to planning, programming, budgeting, and execution, and discussed financial management of the National Guard and reserve components.

5. Module 41: Assessment, Monitoring, and Evaluation

This guest lecture provided course participants with a new perspective on the US security cooperation (SC) enterprise, of which the ACPC was a part. Presenter Claudia Munoz brought her takeaways from her six-year tour at the Pentagon working directly on SC issues. Major topics of discussion during this module included recent US SC reforms; new requirements for assessment, monitoring, and evaluation (AM&E) of all SC activities; the nature of partnership assessments and initiative design documents; and the implications of all of the above for Indonesia.

6. Module 42: Earned Value Management (EVM)

Module 42 introduced ACPC participants to another new topic, earned value management. Shaun McGee led the class through an overview of EVM as a concept; its practical applications; its strengths and weaknesses; and some real-world examples of its use in the US DOD and other analytic contexts.

7. Modules 43-44: Field Studies Visit: Udvar-Hazy Center

Week 3's field studies trip took participants to the Smithsonian Institution's Steven F. Udvar-Hazy Center, part of the National Air and Space Museum, located in Chantilly, VA. The course group enjoyed a tour customized to their interests by a docent with decades of experience in the aerospace industry.

8. Module 45: Process Mapping

In Module 45, IDA Director of Defense Institution Building, Dr. Wade Hinkle, explained the rationale, methodology, and benefits of process mapping, illustrating key concepts with process maps developed during IDA work with the Ministry of Defense of the Philippines (and shared with that partner's permission), as well as process maps from 2015 work in Indonesia with Renhan.

9. Module 46: Organizational Design

Building on the discussion of process maps in the previous module, in Module 46, Dr. Hinkle explored with participants the concept of organizational design. Major topics of discussion included criteria for organizational design, the organizational assessment process, workload definition, and deriving periodic processes from key decision products. This block also included a streamlined case study on organizational design using notional Republic of X data.

10. Module 47: Organizational Change Exercise

Module 47 challenged participants to use insights from the previous two modules to complete a process mapping and organizational design exercise. The exercise asked participants to design part of an acquisition planning process for Indonesia, focusing on conducting analyses of alternatives, and to create a map of that process as well as an organizational chart for the analytical office within the Ministry of Defense that would oversee it.

11. Module 48: Indonesia-US Policy Discussion

In this module, Office of the Undersecretary of Defense for Policy (OUSD (P)) desk officer for Indonesia LTC Leo Liebreich discussed the status of the US-Indonesia relationship and major areas of cooperation between the two countries. LTC Liebreich left ample time for questions and led a lively discussion with the participants about current events and policy issues.

12. Module 49: Managing an Analyst's Career

In Module 49, Dr. Sweetser returned to discuss how to identify, develop, and support strong defense and military analysts and manage their career trajectories. This block was part lecture and part mentoring session, advising the participants and answering their questions about how to establish and manage a robust defense analytic corps.

13. Modules 50-52: Organizational Design Exercise

In the final substantive block of the course, Mr. Goodman highlighted the challenges that Indonesia would need to address in establishing a capability planning office. The students spent the bulk of the time examining these issues and writing a report to their leadership on how to address these challenges and to start the process of establishing a capability planning office upon their return to Jakarta.

14. Module 53: Course Outbrief

During this final module, Mr. Goodman revisited the course goals and major themes with the group, solicited participant feedback on the course, and discussed arrangements for graduation and the return trip to Jakarta.

F. Post-Test & Participant Surveys

Completion of the post-test was the final participant activity prior to graduation. This test was functionally identical to the pre-test; the only change was a shuffling of the order of the questions, in line with test design best practices. For the same reasons, the participants were not made aware ahead of time of the existence or nature of the post-test.

1. Comparing Pre- and Post-Test Results

Analysis of pre- and post-test results revealed a combination of improvement in some areas and stagnation or regression in others. The highest post-test score was a 28/36. This represented a one-point improvement for the individual in question over his pre-test score. The most improved individual brought his pre-test score of 12/36 up 11 points to a 23/36. Some illustrative takeaways from the data are:

- The mean and median scores increased from the pre-test to the post-test, suggesting that student knowledge of the material increased during the course.
- Eight individuals had overall post-test scores the same as or worse than their pre-test scores; five individuals improved their post-test scores by only one point.
- The distribution of test scores had a higher standard deviation on the post-test than the pre-test. This may suggest that factors other than course knowledge were at play in the post-test scores.
- In the case of 16/36 questions, either the same number, or *fewer* people correctly answered *after* the course. Understanding of more technical topics, including FOCIS, appears to have decreased after the course.

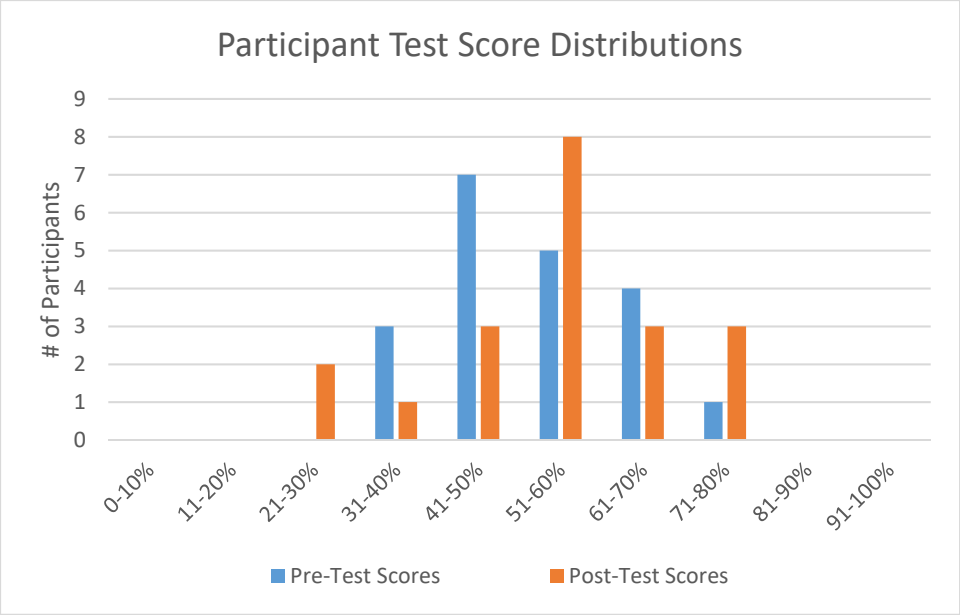

Figure 9. Participant Pre- and Post-Test Score Distributions

Table 2. Pre- and Post-Test Result Statistics

Pre- and Post-Test Result Statistics			
	Pre-Test		**Post-Test**
Mean Score	52%	Mean Score	54%
Lowest Score	33%	Lowest Score	28%
Median Score	50%	Median Score	57%
Highest Score	75%	Highest Score	78%
Standard Deviation	11%	Standard Deviation	14%

2. Surveys

In addition to the pre- and post-tests, participants took surveys at the end of each week of instruction, as well as a broader survey at the end of the course. Major takeaways from the survey results include:

- Overall, participants overwhelmingly enjoyed the course and found it worthwhile.
  - More than 94% of respondents said that the overall quality of the course was excellent.
  - 100% of respondents said they would recommend the course to a colleague.
  - Participants were very impressed with the instructors and their breadth and depth of experience.

- There were 3.4 times more write-in submissions for favorite parts of the course than least favorites (68 items versus 20, respectively).
- All respondents agreed that the learning materials were relevant and useful; the course increased their knowledge of and interest in defense management; and that learning more about defense management can benefit Indonesia.

- Most participants said that, in general, the material was at the right level each week, and they did not have many outstanding questions. However, many felt there was not enough time allotted for exercises or learning the most complex material.
- There were several topics that 10 or more participants stated they would like to hear more about (see Table 3).

Table 3. ACPC Topics of Highest Future Interest to Participants

Topic	Week	# Votes
Life cycle management / Manajemen siklus hidup alutsista	3	16
Force-Oriented Cost Information System (FOCIS) / Sistem Informasi Aplikasi Perencanaan (SIAP)	1	14
Joint concepts and joint concept development / Konsep gabungan dan pengembangan konsep gabungan	1	13
Problem solving and creative thinking / Pemecahan masalah dan pemikiran kreatif	2	13
Cost estimation / Estimasi biaya	2	13
Force generation / Pembentukan kekuatan	3	13
Defense analysis / Analisis pertahanan	1	12
National security and defense strategies / Strategi keamanan dan pertahanan nasional	1	11
Risk, risk assessment, and risk management / Risiko, penilaian risiko, dan manajemen risiko	1	11
Root cause analysis / Analisa akar masalah	2	11
Acquisition planning / Perencanaan Akuisisi	2	11
Cost-effectiveness analysis / Analisa efektivitas biaya	2	11
Defense planning scenarios / Skenario perencanaan pertahanan	1	10
Mission-based capability assessment / Penilaian kemampuan berbasis misi	1	10
Running a defense study / Menjalankan kajian pertahanan	2	10
Budgeting for contingencies / Menyusun anggaran untuk kondisi tidak terduga	2	10
Multi-year plans and budgets / Rencana dan anggaran multi-tahun	2	10
Logistics / Logistik	3	10
Process mapping / Pemetaan proses	3	10

- Many participants believe that running the course repeatedly will be necessary to increase the number of people in their organizations with this knowledge and allow "real changes" to take hold.
- Opinions were mixed on the field activities, with the Udvar-Hazy and Marine Corps Museum visits getting the highest marks and the Pentagon tour the lowest marks. Fifty-eight percent of respondents felt that the field activities were an important part of the course.
- The Residence Inn Pentagon City got very high marks from participants across the board; IDA is using the same hotel for the Colombian ACPC cohort in June 2019.
- The interpreters and the IDA shuttle were among the highest-ranked parts of the ACPC experience.

This participant feedback will shape future iterations of the ACPC, as well as other materials delivered by IDA teams in Indonesia and other partner countries in the future. The true measure of the outcomes of the course will only be known when students begin to implement and use the analytic tools they learned during the ACPC and work to establish the capability planning office.

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4. Lessons Learned & Next Steps

A. Lessons Learned

While the first iteration of the ACPC was successfully delivered and well-received by participants, the sponsor, and other stakeholders, there were several lessons learned worth noting and applying to future courses. They include:

- More time should be allocated for exercises. Many participants felt that the interactive modules were among the most interesting and helpful to them, but were often rushed, cutting short important discussions and preventing a fuller understanding of some key topics.
- Technical topics are highly valued but require a different didactic approach. While participants rated FOCIS and other technical topics among the most important and interesting, they felt that a slower and more individualized approach to instruction was required to ensure broad understanding and build meaningful technical ability.
- Each presenter should deliver no more than two sequential 90-minute modules on any given day. Many participants felt that there was an inverse relationship between instructors' effectiveness and the amount of time they spent teaching, especially after the 90-minute mark.
- Involving the Indonesian Embassy in Washington in the course was of great value. The team reached out to the Indonesian Embassy in Washington to inform them about the course and the presence of the 20 Indonesian officers at the ACPC. This allowed the Embassy to assist with group logistics; send attaches and others to give guest lectures during the course; arrange for dinners, Friday prayers, and other events for the participants; and otherwise enhance the participants' experience in the United States. We would recommend that any team conducting the course in the US in the future engage with the relevant foreign mission, as appropriate.

B. Next Steps

Potential next steps with the Kuathan group that constituted the first participant cohort include: meeting with Kuathan leadership to discuss the roadmap for building a defense analytic office, should they choose to do so; re-running the basic course to begin training

a second cadre of capability planners to staff said office; and planning for future ad hoc engagements with the first ACPC cohort on specific topics of interest. The Indonesia team will continue to work these issues with the partner on future trips to Jakarta through FY20 and beyond.

Next steps for the ACPC curriculum include its use with groups from other countries. As of this writing, plans are already in the works for IDA to host a Colombian version using ACPC-specific material in June 2019, funded by Embassy Bogota's Office of Security Cooperation (OSC).

Appendix A.
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Appendix B.
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Appendix C.
Acronyms

ACPC	Advanced Capability Planners Course
ANSTRA	Kemhan Directorate of Strategic Analysis
AM&E	Assessment, Monitoring, and Evaluation
BAPPENAS	Indonesian Ministry of National Development Planning
BARANAHAN	Defense Facilities Agency (Indonesian)
BCPC	Basic Capability Planners Course
BOT	Blanket Order Training
CARD	Cost Analysis and Research Division
CBP	Capability-Based Planning
CCMR	Center for Civil-Military Relations
COR	Contracting Officer's Representative
DAO	Defense Attaché Office
DASD	Deputy Assistant Secretary of Defense
DATT	Defense Attaché
DGMT	Defense Governance and Management Team
DIB	Defense Institution Building
DIRI	Defense Institutional Reform Initiative
DITMAT	Kuathan Directorate of Materiel
DOD	Department of Defense
DRM	Defense Resource Management
DRMS	Defense Resource Management Studies
DSCA	Defense Security Cooperation Agency
EVM	Earned Value Management
FOCIS	Force-Oriented Cost Information System
HRM	Human Resources Management
HQ	Headquarters
IAD	Intelligence Analyses Division
IBP	International Best Practice
ICB	Institutional Capacity Building
IDA	Institute for Defense Analyses
IMET	International Military Education and Training
INDOPACOM	US Indo-Pacific Command

ISG	Institute for Security Governance
JAKSTRA	Kemhan Directorate of Strategic Policy
JAWD	Joint Advanced Warfighting Division
JCIDS	Joint Capabilities Integration and Development System
JCP	Joint Capability Planning
KEMHAN	Indonesian Ministry of Defense
KUATHAN	Kemhan Directorate of Defense Strength
LCC	Life Cycle Cost
LCM	Life Cycle Management
LTC	Lieutenant Colonel
MABES-TNI	Indonesian Joint Military Headquarters
MASL	Military Articles and Services List
MIPR	Military Interdepartmental Purchase Request
MoD	Ministry of Defense
MODA	Ministry of Defense Advisor
NATO	North Atlantic Treaty Organization
NETSAFA	Naval Education and Training Security Assistance Field Activity
NPS	Naval Postgraduate School
ODC	Office of Defense Cooperation
OFRP	Optimized Fleet Response Plan
OSC	Office of Security Cooperation
OSD	Office of the Secretary of Defense
OUSD (P)	Office of the Undersecretary of Defense for Policy
POTHAN	Kemhan Directorate of Defense Potential
RENHAN	Kemhan Directorate of Planning
RI	Republic of Indonesia
SANweb	Security Assistance Network Webportal
SDO	Senior Defense Official
SED	System Evaluation Division
SFRD	Strategy, Forces, and Resources Division
SIAP	Sistem Informasi Aplikasi Perencanaan (Indonesian name for FOCIS)
SMEs	Subject Matter Experts
STRAHAN	Kemhan Directorate of Defense Strategy
The TNI	The Indonesian Military
TNI-AD	Indonesian Army
TNI-AL	Indonesian Navy
TNI-AU	Indonesian Air Force
UNHAN	Indonesian Defense University

Appendix D.
ACPC Module and Presenter List

Week 1: Defense Planning

Module 1: ACPC Orientation and Overview – Patrick Goodman

Module 2: Overview of Defense Analysis – Patrick Goodman

Module 3: National Security and Defense Strategy – Jason Dechant

Module 4: Defense Diplomacy (Embassy of Indonesia)

Module 5: Risk in Defense and Security – Brittany Gregerson

Module 6: Defense Planning Scenarios – Jason Dechant

Modules 7-8: Defense Planning Scenarios Development Exercise – Jason Dechant

Module 9: War Games – Mark Vinson

Modules 10-12: Field Studies Visit: Marine Corps Warfighting Lab & National Museum of the Marine Corps

Module 13: Joint Concepts and Joint Operations – Mark Vinson

Module 14: Joint Concept Development Exercise – Mark Vinson

Module 15: Mission-Based Capability Assessment – Patrick Goodman

Module 16: National Defense Planning Systems (w/JCIDS) – Mark Philips

Module 17: FOCIS Model Review – Shaun McGee

Module 18: FOCIS Force Structure and Force Posture Exercise – Shaun McGee

Week 2: Defense Analysis

Module 19: Elements of a Defense Study – Al Sweetser

Module 20: Problem Solving and Creative Thinking – Al Sweetser

Module 21: Data Sources and Data Management – Al Sweetser

Module 22: Root Cause Analysis Review & Exercise – Brittany Gregerson

Module 23: Cost Estimation – Chuck Fletcher

Module 24: Analytical Techniques in Cost Estimating – Chuck Fletcher

Modules 25-26: Building Simple Analytical Tools Exercise – Chuck Fletcher

Module 27: Budgets, Discounting and Contingency Costs – Shaun McGee

Module 28: Being an Effective Analyst – Kathy Conley

Modules 29-30: Field Studies Visit: Pentagon Tour

Module 31: Acquisition Planning – Bill Greer

Module 32: Measuring Performance and Effectiveness Exercise – Bill Greer

Module 33: Cost-Effectiveness Analyses Exercise – Bill Greer

Module 34: Multi-Year Plans and Budgets in FOCIS Exercise – Maggie Li

Module 35: Data Visualization – Maggie Li

Module 36: Affordability Analyses and Defense Roadmaps – Patrick Goodman

Week 3: Defense Administration

Module 37: Life Cycle Management and Logistics – Shaun McGee

Module 38: Force Generation Exercise – Mike Smith

Module 39: Program Management – Mike Smith

Module 40: Financial Management – Tim Wojtecki

Module 41: Assessment, Monitoring, and Evaluation – Claudia Munoz

Module 42: Earned Value Management (EVM) – Shaun McGee

Modules 43-44: Field Studies Visit: Udvar-Hazy Center

Module 45: Process Mapping – Wade Hinkle

Module 46: Organizational Design – Wade Hinkle

Module 47: Organizational Change Exercise – Wade Hinkle

Module 48: Indonesia-US Policy Discussion – Leo Liebreich

Module 49: Managing an Analyst's Career – Al Sweetser

Modules 50-52: Organizational Design Exercise – Patrick Goodman

Module 53: Course Outbrief – Patrick Goodman

Appendix E.
List of Participants

Title/ Rank	Name
COL	Eddy Kuncoro
COL	Berlin Germany
COL	Anis Rusdiyono
COL	Tjahjo Khurniawan
COL	Nanang Hery Soebakgijo
COL	Yan Fauzullah
COL	Masnal Samian
COL	Samsul Bahari
COL	Anggun Nan Tungga
COL	Ditya Farianto
LTC	Noukman Noula
LTC	Rahmat Afandi
LTC	Denny Marantika
LTC	Arifin Rachmad Jaya
LTC	Beni Ushadi
LTC	Badra
LTC	Febri Yakob Paruntu
LTC	Rudi Firmansyah Asari
MAJ	Cecep Satria Kurniawan
MAJ	Frank Life Son

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Appendix F.
ACPC Contributor List

Contributor Name	IDA Division	Modules
John Caldwell (JC)	JAWD	9, 13, 14
Kathy Conley (KC)	SFRD	28
Jason Dechant (JD)	SFRD	3, 6, 7, 8
Chuck Fletcher (CF)	SFRD	23, 24, 25, 26
Patrick Goodman (PG)	SFRD	1, 2, 15, 36, 50, 51, 52, 53
William “Bill” Greer (WG)	SED	31, 32, 33
Brittany Gregerson (BG)	IAD	5, 22
Wade Hinkle (WH)	SFRD	45, 46, 47
Maggie Li (ML)	CARD	34, 35
Theodore “Leo” Liebreich (LL)	N/A	48
Shaun McGee (SM)	CARD	17, 18, 27, 37, 42
Claudia Munoz (CM)	SFRD	41
Mark Philips (MP)	JAWD	16

Contributor Name	IDA Division	Modules
Michael Smith (MS)	SFRD	9, 13, 14, 38, 39
Wilmer “Al” Sweetser (AS)	IAD	19, 20, 21, 49
Mark Vinson (MV)	JAWD	9, 13, 14
Tim Wojtecki (TW)	CARD	40

Appendix G.
ACPC Pre/Post-Test Questions

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q1 Which of the following is a root cause of poor defense management systems? / Mana dari pilihan berikut ini yang BUKAN merupakan pilar manajemen pertahanan?	A standardized taxonomy / Taksonomi yang terstandarisasi	Organizational alignment / Penyelarasan organisasi	✓ **Bottom-up planning** / Perencanaan 'bottom-up'	Rigorous analysis / Analisis mendetil	
Q2 Which of the following is not part of defense resource management? / Mana dari pilihan berikut ini yang BUKAN bagian dari manajemen sumber daya pertahanan?	Joint capability planning / Perencanaan kapabilitas gabungan	Joint concepts / Konsep gabungan	Program and budget planning / Perencanaan program dan anggaran	✓ **Joint operational training** / Pelatihan operasional gabungan	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q3 A force generation process should: / Proses suatu pembentukan suatu kekuatan militer (force generation) harus:	Sustain a force that is fully trained and always ready to deploy / Mempertahankan kekuatan yang terlatih penuh dan selalu siap untuk diterjunkan	**✓ Provide a balanced, sustainable, and predictable approach to generating forces** / Memiliki pendekatan yang berimbang, berkelanjutan, dan terprediksi dalam menciptakan kekuatan	Prioritize the needs of the operational commander / Memprioritaskan kebutuhan komandan operasional	None of the above / Tidak satu pun jawaban di atas benar	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q4 Which of the following is NOT a legitimate reason to build an analytical tool or model to assist you? / Mana dari pilihan berikut yang BUKAN merupakan alasan yang masuk akal untuk membangun suatu alat atau model analisis untuk membantu Anda?	To investigate or test different solutions quickly / Untuk menyelidiki atau menguji berbagai solusi secara cepat	✓ **Because no one will be able to challenge your answer if it comes from a model** / Agar tidak ada yang bisa mendebat jawaban Anda karena jawaban itu didasarkan pada model	To provide a record of all the cost factors and equations used in the analysis / Untuk memberikan catatan tentang seluruh faktor dan persamaan biaya yang digunakan di dalam analisis	Because building a model requires you to think through the problem, and doing that may help you better understand the problem / Karena untuk membangun sebuah model, kita harus memikirkan secara seksama mengenai suatu masalah, dan dengan menyusun model ini, kita dapat memahami masalah tersebut secara lebih baik	
Q5 What is the starting point for building a process map? / Apa langkah awal dalam menyusun suatu peta proses (process map)?	✓ **Current management practice** / Praktik manajemen saat ini	Desired change in management practice / Perubahan yang diinginkan dalam praktik manajemen	International best practice / Praktik terbaik internasional		

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q6 When doing a study, the most important focus initially is: / Ketika melakukan suatu penelitian, hal pertama yang terpenting untuk dilakukan adalah:	Choosing an analytical tool / Memilih alat bantu analisis	Determining and acquiring resources / Menentukan dan mengakuisisi sumber daya	Collecting data / Mengumpulkan data	✓ **Defining the study question** / Menentukan pertanyaan penelitian	Determining assumptions / Menetapkan asumsi
Q7 Which of the following is not a direct input to joint capability planning? / Mana dari pilihan berikut ini yang BUKAN merupakan input langsung dari perencanaan kapabilitas gabungan (joint capability planning)?	Joint concepts / Konsep gabungan	✓ **Defense strategic plan** / Rencana strategis pertahanan	Capability planning guidance / Panduan perencanaan kapabilitas	Operational cost and readiness data / Biaya operasional dan data kesiapan	
Q8 Which of the following is NOT a component of a joint concept? / Mana dari pilihan berikut yang BUKAN merupakan komponen dari konsep gabungan?	Information on the operational environment / Informasi tentang lingkungan operasional	Statement of the military problem / Pernyataan tentang masalah militer	Main and supporting ideas / Ide utama dan pendukung	✓ **Identification of capability gaps** / Identifikasi kesenjangan (gap) kapabilitas	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q9 Which organizational description best describes the Institute for Defense Analyses (IDA): / Deskripsi mana yang paing tepat menggambarkan Institute for Defense Analyses (IDA) itu?	A US defense contractor / Kontraktor pertahanan Amerika Serikat	✓ **A federally funded research and development corporation (FFRDC)** / Perusahaan penelitian dan pengembangan yang didanai pemerintah federal (FFRDC, federally funded research and development corporation)	RAND	A part of the Office of Defense Cooperation (ODC) / Bagian dari Kantor Kerjasama Pertahanan atau Office of Defense Cooperation (ODC)	
Q10 Which of the following represent the different levels of strategies? / Mana dari pilihan berikut yang mencerminkan tingkatan-tingkatan strategi yang berbeda?	National / Nasional	Ministerial (or departmental) / Kementerian (atau departemen)	Functional / Fungsional	National and Functional /Nasional dan fungsional	✓ **National, ministerial, and functional** / Nasional, kementerian, dan fungsional

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q11 Performance is important. For example, speed is valuable, and range is critical. Besides performance, what else is important to consider in acquisition of new weapon systems? / Kinerja adalah hal yang penting. Contohnya, kecepatan adalah hal yang sangat berharga, dan jangkauan tidak kalah pentingnya. Selain kinerja, apa saja hal penting lain yang harus dipertimbangkan ketika membeli suatu alutsista baru?	Numbers of such systems needed / Jumlah alutsista yang dibutuhkan	Acquisition cost / Biaya akuisisi	Mission effectiveness under circumstances anticipated / Efektivitas misi dalam kondisi yang diprediksi	Operating and support cost / Biaya operasional dan dukungan	✓ **All of the above** / Semua jawaban di atas
Q12 Which of the following is NOT a core component of a planning scenario? / Mana dari pilihan berikut yang BUKAN komponen inti dari skenario perencanaan?	Player/participants / Pemain/peserta	✓ **Detailed analysis of the performance of weapons systems** / Analisis mendetil tentang kinerja suatu sistem persenjataan (alutsista)	Strategic context and assumptions / Konteks dan asumsi strategis	Mission/objectives / Misi/sasaran	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q13 Which of the following is NOT a key use of a wargame? / Mana dari pilihan berikut yang BUKAN merupakan manfaat utama dari suatu simulasi perang (war game)?	Discovering ideas or examining an array of issues and operational insights / Menemukan ide atau mengamati berbagai isu dan sudut pandang operasional	Helping decision makers visualize the flow of expected and/or unexpected events / Membantu para pembuat kebijakan memvisualisasi alur peristiwa yang diperkirakan dan/atau tidak diperkirakan	✓ **Performing detailed analysis to determine the performance of weapons systems** / Melakukan analisis mendetil untuk menentukan kinerja suatu alutsista	Assessing alternatives (e.g., policies, OPLAN courses of action, capability solutions) / Menilai alternatif yang ada (kebijakan, rangkaian aksi OPLAN, dan solusi kapabilitas)	All of the above / Semua jawaban di atas
Q14 Which of the following is a foundational requirement for joint concepts? / Mana dari pilihan berikut yang merupakan persyaratan mendasar bagi suatu konsep gabungan?	Proposing new ways of operating that break with historical practices / Mengusulkan cara-cara baru operasi yang berbeda dari praktik selama ini (historis)	Inclusion of new, innovative theories of war / Dimasukkannya teori perang baru dan inovatif	✓ **Being adequate, feasible, and acceptable** / Memadai, dapat dilaksanakan, dan berterima	Strongly favoring the specific use of modern military science over the intangible application of military art / Sangat berfokus pada penggunaan ilmu militer modern daripada aplikasi seni militer yang tak kasat mata	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q15 Which of the following is not a functional component of a military unit? / Mana dari pilihan berikut ini yang BUKAN merupakan komponen fungsional dari unit/kesatuan militer?	People / SDM	Readiness (training, munitions, fuel, etc) / Kesiapan (pelatihan, amunisi, bahan bakar, dsb.)	✓ **Leadership** / Kepemimpinan	Equipment / Alutsista	
Q16 In a program and budget development model such as FOCIS, what are the five categories of resource (readiness) data that describe a complete military unit? / Dalam model program dan pengembangan anggaran seperti FOCIS, apa saja lima kategori data sumber daya (kesiapan) yang menggambarkan suatu unit/kesatuan militer secara lengkap?	Manpower, equipment quantity, equipment metric, unit activity, and war reserve / Personil, kuantitas alutsista, metrik alutsista, kegiatan kesatuan, dan peralatan/amunisi cadangan	Manpower, equipment quantity, equipment metric, facility quantity, and war reserve / Personil, kuantitas alutsista, metrik alutsista, kegiatan kesatuan, dan peralatan/amunisi cadangan	Manpower, equipment quantity, equipment use, facility quantity, and supply / Personil, kuantitas alutsista, penggunaan alutsista, kuantitas fasilitas, dan pasokan	✓ **Manpower, equipment quantity, equipment use, unit activity, and war reserve** / Personil, kuantitas alutsista, penggunaan alutsista, kegiatan unit/kesatuan, dan peralatan/amunisi cadangan	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q17 Which of the following are best-suited to test the range of scenarios for which the military must prepare? / Mana dari pilihan berikut yang paling sesuai untuk menguji berbagai skenario yang harus disiapkan oleh suatu organisasi militer?	✓ **Scenario sets** / Kumpulan skenario	A single scenario / Skenario tunggal	The national defense strategy / Strategi pertahanan nasional	A joint concept / Konsep gabungan (joint concept)	
Q18 Which of the following is NOT a key use of a defense planning scenario? / Mana dari pilihan berikut yang BUKAN merupakan manfaat utama dari skenario perencanaan pertahanan?	Senior leader learning, training, and education / Pembelajaran, pelatihan, dan pendidikan bagi pimpinan senior	Strategy development / Pengembangan strategi	Serving as the basis for capability analysis / Sebagai dasar analisis kapabilitas	✓ **Developing detailed cost estimates** / Mengembangkan estimasi biaya rinci	
Q19 Data validation is defined as: / Validasi data adalah:	Acquiring and cleaning data / Memperoleh dan membersihkan data	Ensuring data entry was correct / Memastikan entri data dilakukan dengan benar	✓ **Ensuring the data accurately represents what was intended** / Memastikan data mencerminkan secara akurat apa yang dikehendaki	Protecting the security of data / Melindungi keamanan data	Buying the hardware and software to store the data / Membeli hardware dan software untuk menyimpan data

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q20 In values-focused thinking, the most important step up front is to: / Dalam pemikiran berfokus nilai, langkah terpenting yang harus dilakukan di awal adalah:	Identify decision alternatives / Mengidentifikasi alternatif-alternatif keputusan	Evaluate alternatives / Mengevaluasi alternatif	Specify values / Menentukan nilai	Generate alternatives / Mengembangkan alternatif	**✓ Define the problem and identify stakeholders** / Mendefinisikan masalah dan mengidentifikasi pemangku kepentingan
Q21 What is the most important consideration when initially designing a cost estimate? / Apa pertimbangan terpenting pada saat awal merancang estimasi biaya?	If the cost estimate will reveal any criminal activity / Memastikan apakah estimasi biaya dapat mengungkapkan seluruh tindak kejahatan	Which offices might be embarrassed by the results / Departemen/divisi mana yang akan dipermalukan oleh hasil yang ditemukan	**✓ How the cost estimate will be used** / Bagaimana estimasi biaya akan digunakan	How to account for inflation over a multi-year period / Bagaimana memperhitungkan inflasi untuk periode multi-tahun	
Q22 Which of the following costs should NOT be considered operations and support cost? / Mana dari biaya berikut yang TIDAK boleh dianggap sebagai biaya operasional dan dukungan?	Fuel for military vehicles used during training / Bahan bakar untuk kendaraan militer yang digunakan di sepanjang pelatihan	Maintenance costs for firing ranges / Biaya pemeliharaan lapangan tembak	Salary of personnel deployed to a PKO operation / Gaji personil yang diterjunkan untuk operasi PKO	**✓ Cost to build a new motor pool** / Biaya untuk membangun suatu motor pool baru	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q23 When developing a military operations cost model, which of the following would you do first? / Ketika mengembangkan suatu model biaya operasi militer, mana dari hal berikut yang akan pertama kali Anda lakukan?	Select an appropriate cost breakdown structure / Memilih struktur penjabaran (breakdown) biaya yang sesuai	Find relevant, reliable, and available data / Mencari data yang relevan, andal, dan tersedia	Conduct verification and validation of the model / Melakukan verifikasi dan validasi model	✓ **Break down the problem and define the model's purpose** / Menjabarkan masalah dan menentukan tujuan model	
Q24 How can you discover and justify to others a legitimate need for new weapon systems? / Bagaimana cara Anda untuk menemukan dan menjustifikasi kebutuhan akan suatu alutsista baru kepada pihak lain?	Instinct / Insting	Your reputation as a wise person / Reputasi Anda sebagai orang yang terkenal bijak	Neighboring countries all have new equipment, so you need some too / Semua negara tetangga sudah membeli alutsista baru, jadi Anda juga harus membelinya	You have been offered a low price to acquire a weapon system / Anda mendapatkan penawaran harga murah untuk membeli alutsista baru	✓ **You have identified a demonstrable capability gap that can only be filled with a new weapon system** / Anda telah mengidentifikasi adanya kesenjangan kapabilitas yang jelas, yang hanya dapat diatasi dengan alutsista baru

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q25 What are the names of the six phases that support the development and implementation of a life-cycle management support concept for a major weapon system? / Apa saja keenam tahap yang mendukung pengembangan dan pelaksanaan konsep dukungan manajemen siklus hidup (life-cycle management) untuk alutsista besar?	Preparation, acquisition, procurement, training, sustainment and support, and disposal / Persiapan, akuisisi, pengadaan, pelatihan, pemeliharaan dan dukungan, dan penghapusan	Conceptualization, acquisition, training, commissioning, operations and maintenance, and disposal / Konseptualisasi, akuisisi, pelatihan, commissioning (memulai operasional), operasi dan pemeliharaan, dan penghapusan	✓ **Conceptualization, preparation, procurement, commissioning, sustainment and support, and decommissioning** / Konseptualisasi, persiapan, pengadaan, commissioning, pemeliharaan dan dukungan, dan decommissioning (penghentian operasi)	Preparation, acquisition, training, commissioning, operations and maintenance, and decommissioning / Persiapan, akuisisi, pelatihan, commissioning, operasi dan pemeliharaan, dan decommissioning	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q26 Which of the following is NOT a way in which the central support commander prioritizes competing demands? / Mana dari pilihan berikut yang BUKAN merupakan cara yang seharusnya digunakan oleh central support commander ketika menentukan prioritas dari berbagai permintaan yang ada?	Across the central support managers / Di seluruh central support manager	Between weapons control managers within the same functional capability manager / Antara manager kontrol senjata di dalam manajer kapabilitas fungsional yang sama	Across the functional capability managers / Di seluruh manajer kapabilitas fungsional	✓ **None of the above** / Tidak satu pun jawaban di atas benar	
Q27 What is financial management? / Apa yang dimaksud dengan manajemen finansial?	Preparing and directing the financial activities of an organization, such as buying and selling / Mempersiapkan dan mengarahkan kegiatan finansial dari sebuah organisasi, seperti pembelian dan penjualan	Management of the finances of an organization in order to achieve financial objectives and goals / Manajemen keuangan suatu organisasi untuk mencapai berbagai sasaran dan tujuan finansialnya	Raising financial resources and utilizing them effectively to achieve organizational goals / Mencari sumber daya finansial dan memanfaatkannya secara efektif untuk mencapai tujuan organisasi	✓ **All of the above** / Semua jawaban di atas benar	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q28 In an “earned value” project management system, what is the difference between the “budgeted cost of work scheduled,” abbreviated as BCWS, and the “budgeted cost of work performed,” abbreviated as BCWP? / Di dalam suatu sistem manajemen proyek "earned value", apa perbedaan antara "budgeted cost of work scheduled" (BCWS), dengan "budgeted cost of work performed" (BCWP)?	BCWS is the estimated value of the work scheduled to be performed during the current time period, whereas BCWP is the actual costs incurred to complete the work performed during the current time period. / BCWS adalah nilai perkiraan pekerjaan yang dijadwalkan akan dilaksanakan pada periode saat ini, sementara BCWP adalah biaya aktual yang timbul untuk menyelesaikan pekerjaan yang dilaksanakan pada periode saat ini.	BCWS is the total estimated value of all work scheduled, whereas BCWP is the contractor's most recent estimate of the cost to complete all work planned. / BCWS adalah nilai perkiraan total dari seluruh pekerjaan yang dijadwalkan, sementara BCWP adalah perkiraan biaya terbaru oleh kontraktor untuk menyelesaikan seluruh pekerjaan yang direncanakan.	**✓ BCWS is the estimated value of the work scheduled to be performed during the current time period, whereas BCWP is the estimated value of the work actually performed during the current time period** / BCWS adalah nilai perkiraan pekerjaan yang dijadwalkan akan dilaksanakan pada periode saat ini, sementara BCWP adalah nilai perkiraan kerja yang secara aktual dilaksanakan pada periode saat ini.	BCWS is the actual cost incurred to complete the work performed during the current time period, whereas BCWP is the estimated value of the work actually performed during the current time period. / BCWS adalah biaya aktual (sebenarnya) yang timbul untuk menyelesaikan pekerjaan yang dilaksanakan pada periode saat ini, sementara BCWP adalah nilai perkiraan kerja yang secara aktual (benar-benar) dilaksanakan pada periode saat ini.	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q29 Which of the following is not a pillar of defense management? / Mana dari pilihan berikut ini yang BUKAN merupakan pilar manajemen pertahanan?	Defense Strategy and Policy / Strategi dan Kebijakan Pertahanan	Defense Resource Management / Manajemen Sumber Daya Pertahanan	✓ **Defense Diplomacy** / Diplomasi Pertahanan	Human Resource Management / Manajemen Sumber Daya Manusia	Logistics / Logistik
Q30 What is the goal of organizational design? / Apa tujuan memiliki suatu desain organisasi?	To facilitate staff training and development / Memfasilitasi pelatihan dan pengembangan staf	To conduct a workload assessment / Melakukan penilaian beban kerja	✓ **To align organizations with planning and management processes** / Menyelaraskan organisasi dengan proses perencanaan dan manajemen		
Q31 Risk is a combination of: / Risiko adalah kombinasi dari:	✓ **Likelihood and consequences** / Kemungkinan dan konsekuensi	Strategy and consequences /Strategi dan Konsekuensi			

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q32 Why is it important to understand an organization's risk attitude and risk appetite? Because these measures: / Mengapa penting untuk memahami sikap risiko (risk attitude) dan minat risiko (risk appetite) suatu organisasi? Karena keduanya membantu kita dalam:	Define the amount and type of risk the organization finds acceptable and justifiable. / Menetapkan jumlah dan tipe risiko yang dapat diterima dan dapat dibenarkan oleh organisasi.	Provide the basis for doing risk assessments. / Menjadi dasar untuk melakukan asesmen risiko.	Help define the context for risk management. / Membantu mendefinisikan konteks untuk manajemen risiko.	✓ **All of the above**. / Semua jawaban di atas.	
Q33 Which function in the FOCIS model allows users to assign units to custom categories such as location, program element, joint capability area, and equipment type? / Fungsi apa di dalam model FOCIS yang memungkinkan penggunanya untuk menempatkan kesatuan ke dalam kategori custom seperti lokasi, elemen program, area kapabilitas gabungan, dan tipe alutsista?	✓ **Analysis models** / Model analisis	Reports / Laporan	Command levels / Tingkat komando	Cost accounts / Akun biaya	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q34 Which of the following is NOT typically associated with root cause analysis? / Mana dari pilihan berikut yang biasanya TIDAK terkait dengan analisis penyebab akar?	Brainstorming	Process failures / Kegagalan proses	Asking “why” / Menanyakan "mengapa"	Collecting data / Mengumpulkan data	✓ **Budget planning** / Perencanaan anggaran
Q35 In the analogy of the elephant, the path, and the rider, what does the path represent in terms of defense management? / Jika menggunakan analogi seekor gajah, sebuah jalan, dan seorang pengendara; 'jalan' disini mencerminkan apa dalam konteks manajemen pertahanan?	The organization / Organisasi	The individual / Individu	✓ **Management processes** / Proses manajemen	Life cycle cost / Biaya siklus hidup	

Questions (Post-Test Numbering)	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
Q36 Computers and high-fidelity simulation software can predict combat and other mission outcomes with high accuracy, but at a high price. Cost assessments can be intricate as well. Such systems and procedures are data-intensive and expensive. How often are they necessary to make good cost-effectiveness acquisition decisions? / Komputer dan software simulasi high-fidelity dapat memprediksi hasil pertempuran dan misi lainnya dengan akurasi tinggi, namun biayanya sangat mahal. Penilaian biaya terkadang juga bisa menjadi sangat rumit. Sistem dan prosedur seperti itu umumnya membutuhkan banyak data (data-intensive) dan mahal. Kapankah keputusan akuisisi yang efektif biaya penting untuk dilakukan?	All the time. Who would believe you if you used anything less than the state-of-the art software and computing systems with lots of data? / Setiap saat. Siapa yang mau percaya jika Anda tidak menggunakan software dan sistem komputasi tercanggih yang dibekali dengan banyak data?	Almost never. There is usually a way to make good decisions by focusing on a small set of critical parameters and using simple calculations. / Hampir tidak pernah. Biasanya terdapat cara untuk mengambil keputusan yang baik dengan berfokus pada beberapa parameter penting dan menggunakan perhitungan sederhana.	**✓ Sometimes. There is some truth in both answers "a" and "b". Each case is different. We should always look for simple approaches, but be open to more sophisticated systems and procedures where necessary**. / Kadang-kadang. Ada sisi kebenaran dari jawaban "a" dan "b". Setiap kasus harus diperlakukan secara berbeda. Kita harus selalu mencari pendekatan yang sederhana, namun juga bersikap terbuka pada sistem dan prosedur yang lebih maju jika diperlukan.		

Appendix H.
ACPC Course Material

This appendix provides the final version of the material presented during the ACPC, by block. Participants received this version of the course material during the course.

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14. ABSTRACT

For nearly 10 years, the United States Government (USG), along with its Institutional Capacity Building (ICB) partner the Institute for Defense Analyses (IDA), has been engaged with the Republic of Indonesia (RI) Ministry of Defense (MoD) on ICB efforts assisting the RI to improve how it organizes, trains, equips, deploys, employs, and sustains the Indonesian military, Tentara Nasional Indonesia, or TNI. The Advanced Capability Planners' Course (ACPC) described in this document is a milestone in this most recent ICB effort in Indonesia and represents significant progress in ICB efforts within RI. This first ever ACPC led 20 hand-selected MoD and TNI officers through a three-week course executed through three main themes: defense planning, defense analyses, and defense administration. Defense planning blocks focused on types of analyses done at the strategy and joint concepts level, while defense analysis focused on more traditional force structure analyses. Defense administration blocks sought to give this cohort insight on how to build their own capability planning office within the MoD. Looking forward, the ACPC represents a starting position for implementing capability-based planning more broadly across the Indonesian MoD and TNI; success in this endeavor will require significant effort on the part of the RI, and significant commitment and patience from both the RI and the USG.

15. SUBJECT TERMS

Capability-based planning, capability planning office, institutional capacity building (ICB), defense institution building (DIB), Indonesia, Tentara Nasional Indonesia (TNI), Indonesian Ministry of Defense (Kemhan), Defense Security Cooperation Agency (DSCA)

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