

A monthly newsletter of the Energy Facility Contractors Group's Project Delivery Working Group



Issue 35 June 2022

# Summer is here! So is a new CAG and America's favorite precision pilots

Greetings, Energy Facility Contractors Group (EFCOG) Project Delivery Working Group (PDWG)! In this issue of the *Practitioner*, EVMS expert Greg Smith of Humphreys & Associates provides a rundown of the latest Compliance Assessment Governance revision, and we check out the Blue Angels precision flying team as we look forward to the summer air show season. They have more in common with project management than you might think.

### **DOE Releases Compliance Assessment Governance Version 2.0**

By Greg Smith, EVMS Consultant, Humphreys & Associates Revision Date: June 3, 2022

In June 2022, the Department of Energy (DOE) Office of Project Management (PM) released a new version of its Compliance Assessment Governance (CAG) Version 2.0, formally known as the Compliance Assessment Guidance. The change in name however so slight, reflects the significance the DOE PM places on the EVMS governance process where good governance provides a well-defined structure to continuously sustain and improve the practice of integrated project management. DOE PM believes that during the life cycle of a project EVMS governance is everyone's responsibility, both customer and contractor alike. While this point has always been the position of DOE PM, its importance towards influencing project outcomes was further highlighted in the results of a recent research study conducted by Arizona State University (ASU) that was sponsored by DOE PM. DOE PM considers the release of CAG 2.0 a significant overhaul to the prior guidance and now aligns with the methodology and structure resulting from the ASU Study.

The primary goal of the ASU Study was to design and produce an evaluation methodology and toolset that can be used across agencies and departments to consistently assess the maturity and environment of projects or programs of various types and sizes that use an EVMS. The toolset developed assesses a spectrum of EVMS maturity attributes centered around the EIA-748 Standard for EVMS Guidelines, while also referencing the Project Management Institute (PMI) American National Standards Institute (ANSI) standard for EVM (2019) and the International Organization for Standardization (ISO) 21508:2018 guidance. It also takes a novel approach by assessing the environment within which an EVMS is employed. This methodology and toolset are known as the Integrated Project/Program (IP2M) Maturity and Environment Total Risk Rating (METRR) (pronounced "IP2M Meter"). By using IP2M METRR to assess both the maturity

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and environment of an EVMS, or less sophisticated management control systems where EIA-748 compliance is not required, project/program leaders and practitioners can understand the efficacy of the EVMS (or similar management control system) in support of integrated project/program management.

The new methodology has two primary components. The first component assesses the environmental factors that influence the implementation of an EVMS. The ASU Study identified four primary environmental categories: Culture, People, Practices, and Resources. Each category is further broken-down into 27 Environmental Factors (EFs) that are defined by Effectiveness Criteria.

An example of the hierarchy for an EVMS Environmental Assessment is:

#### Category 1 - Culture

**Environmental Factor: 1A** - The contractor organization supports and is committed to EVMS implementation, including making the necessary investments for regular maintenance and self-governance.

Factor Check Point: 1A(a) - a) The contractor integrated project team (IPT)—including corporate leadership, execution and operations personnel, oversight personnel, and support staff—is in place, and it has a demonstrated belief in the intrinsic value of the EVMS to position the project for success. Each of the 27 EFs are assessed using a 5-point grading scale (i.e., 1. Not Acceptable, 2. Needs

THE
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For questions, comments, story ideas or other correspondence, call or email Craig Hewitt at the contact information above. Improvement, 3. Meets Some, 4. Meets Most, 5. High Performing) with each having predetermined weightings. When summarized, all EF scores add up to 1,000 possible points. Final weightings were determined through a rigorous statistical analysis of inputs from various professional sources including the survey of professionals experienced with the practice of project management and EVMS implementation. The results of the ASU Study show that the higher the environment score, the better the chances a project or program will achieve better schedule and budget outcomes.

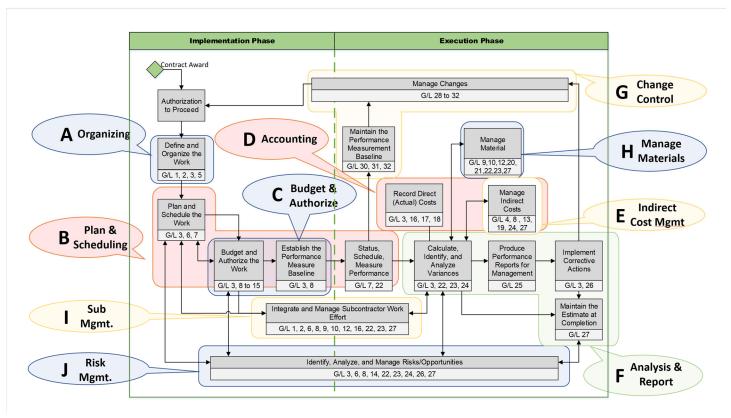
Below are the summary level weightings of the four EVMS Environmental Categories:

- A. Culture: Total Possible Points @ L5 is 313 (31%)
- B. People: Total Possible Points @ L5 is 238 (24%)
- C. Practices: Total Possible Points @ L5 is 235 (24%)
- D. Resources: Total Possible Points @ L5 is 214 (21%)

The second component of the ASU Study and Compliance Assessment Governance (CAG, 2.0) addresses EVMS Maturity. The purpose of EVMS Maturity is to assist in the assessment of compliance with the guidelines in the EIA-748. The maturity assessment consists of ten subprocesses, each of which are further divided into 56 attributes. The ten subprocesses may look familiar to those practitioners having EVMS experience with the notable addition of "Risk Management" to the traditional nine guideline process groupings. The ASU Study captured the ten subprocess groups with the associated EIA-748 guidelines by using the following graphic from National

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Defense Industry Association (NDIA) Integrated Program Management Division (IPMD) Earned Value Management Scalability Guide. The primary purpose for doing this was to place greater focus on management subprocesses which are recognized by most practicing project/program managers rather than placing the entire focus on a particular guideline(s).



Source: DOE PM CAG 2.0

Figure 1: Ten Subprocess Groups and Associated EIA-748 Guidelines

As shown in Figure 2, each of the ten subprocesses are further broken down into attributes. Each attribute is assessed for a maturity level on a 5-point grading scale, plus the option of "Not Applicable" for those attributes that are not relevant to the project/program. For example, some project/program teams do not use resource loaded schedules while others do. The 5-point grading scale is as follows: 1-Not Yet Started, 2-Major Gaps, 3-Minor Gaps, 4-No Gaps, 5-Best in Class. Attributes that are mature enough to be deemed an EIA-748 compliant EVMS are at maturity level of "4." The IP2M METRR methodology allows for a grade of "5" acknowledging management practices that optimize the EVMS. There are two primary sources to make this assessment. The first is the Effectiveness Criteria established for each maturity level, and the second is the DOE Attribute Metrics defined in 188 EVMS Testing Specification Sheets.

Below are the summary level weightings of the ten EVMS Maturity Subprocesses:

- A. Organizing: Total Possible Points @ L5 is 96 (10%)
- B. Planning and Scheduling: Total Possible Points @ L5 is 202 (20%)
- C. Budgeting and Work Authorization: Total Possible Points @ L5 is 178 (18%)
- D. Accounting Considerations: Total Possible Points @ L5 is 65 (7%)

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- E. Indirect Budget and Cost Management: Total Possible Points @ L5 is 55 (6%)
- F. Analysis and Management Reporting: Total Possible Points @ L5 is 109 (11%)
- G. Change Control: Total Possible Points @ L5 is 116 (12%)
- H. Material Management: Total Possible Points @ L5 is 59 (6%)
- I. Subcontract Management: Total Possible Points @ L5 is 60 (6%)
- J. Risk Management: Total Possible Points @ L5 is 60 (6%)

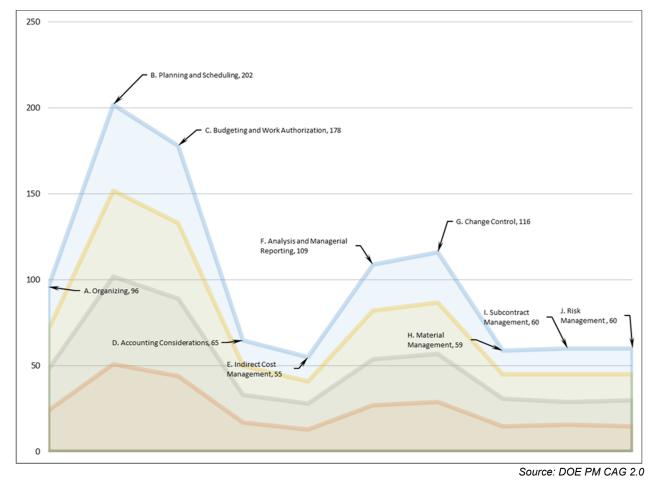


Figure 2: Ten Subprocess Groups Broken Down into Attributes

Of the ten subprocesses that constitute the EVMS, subprocesses B and C account for 380 points, or 38% of the maximum score of 1,000 points (Figure 2). When combined with subprocesses F and G, these four subprocesses account for 605 points, or 61%, of the maximum score. Thus, emphasizing credible plans, schedules, and budgets with adequate controls and rigorous reporting best positions the EVMS to help the project/program team achieve their objectives.

An example of the evaluation hierarchy for an EVMS Maturity Assessment is:

#### Sub-Process A: Organizing

**Attribute A.1:** A single product-oriented Work Breakdown Structure (WBS) encompasses all authorized work and is decomposed to the appropriate levels for effective management and reporting.

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**Effectiveness Criteria A.1.1:** The process to establish a singular, product-oriented WBS that accurately defines the products, services, and deliverables required to complete the project/program has been developed, documented, and approved.

**Metric ID A.01.05:** This metric confirms that the WBS includes all authorized project work and any revisions resulting from authorized changes and modifications. This metric ensures that the WBS identifiers collectively provide a complete definition of work scope requirements.

DOE PM's goal for the new guidance is to provide a synthesized and uniform approach to assessing an EVMS as a means to ensure fairness and consistency in its operations. The current version of the DOE EVMS Implementation Guidance and IP2M METRR documentation can be found here:

https://www.energy.gov/projectmanagement/evms-implementation-guidance and

https://www.energy.gov/projectmanagement/ecrsop-appendices-materials and

https://ip2m.engineering.asu.edu/.

## It Is Not One World

## **The Blue Angels**

his month we veer off to the wild "Blue" yonder and take a look at our very own "Blue Angels", which reminds us, it is *definitely not one world*!!! Our industry shares a few attributes with our high-flying professionals: configuration control, process control, and pride in what we do...just to name a few. Read on to find out more the Blue Angel history, the team, and a message from their Commander.









#### **HISTORY OF THE BLUE ANGELS**

n 1946, the Chief of Naval Operations, Admiral Chester Nimitz, had a vision to create a flight exhibition team in order to raise the public's interest in naval aviation and boost Navy morale. In the 1940's, we thrilled audiences with our precision combat maneuvers in the F6 Hellcat, the F8 Bearcat and the F9 Panther.

## **Blue Angels**

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During the 1950s, we refined our demonstration with aerobatic maneuvers in the F9 Cougar and F-11 Tiger and introduced the first six-plane delta formation, still flown to this day. By the end of the 1960s, we were flying the F-4 Phantom, the only two seat aircraft flown by the delta formation. In 1974, we transitioned to the A-4 Skyhawk, a smaller and lighter aircraft with a tighter turning radius allowing for a more dynamic flight demonstration. In 1986, we celebrated our 40th Anniversary by unveiling the Boeing F/A-18 Hornet. In 2021, we transitioned to our current aircraft the Boeing F/A-18 Super Hornet and celebrated our 75th anniversary.

In 1949, it became necessary for the Blue Angels to operate a support aircraft to move personnel and equipment between show sites. These support aircraft including the Douglas R4D Sky Train, the Curtiss R5C Commando, the Douglas R5D Skymaster, and the Lockheed C-121 Super Constellation. In 1970 the team received the Lockheed Martin C-130, affectionately known as "Fat Albert." In 2020, "Fat Albert" transitioned to its current platform, the C-130J Super Hercules.

#### THE BLUE ANGELS TEAM

A total of 17 officers voluntarily serve with the Blue Angels. Each year the team typically selects three tactical (fighter or fighter/attack) jet pilots, two support officers and one Marine Corps C-130 pilot to relieve departing members.

The Chief of Naval Air Training selects the "Boss," the Blue Angels Commanding Officer. Boss must have at least 3,000 tactical jet flight-hours and have commanded a tactical jet squadron. The Commanding Officer flies the Number 1 jet. The Chief of Naval Air Training also selects the "XO," the Blue Angels Executive Officer. XO is a Naval Flight Officer (NFO) or Naval Aviator with at least 1,750 flight-hours.

Career-oriented Navy and Marine Corps jet pilots with an aircraft carrier qualification and a minimum of 1,250 tactical jet flight-hours are eligible for positions flying jets Number 2 through 7. The Events Coordinator, Number 8, is a Naval Flight Officer (NFO) or Naval Aviator who has finished their first tour. The Marine Corps pilots flying the C-130J Hercules aircraft, affectionately known as "Fat Albert," must be aircraft commander qualified with at least 1,200 flight hours.

Career-oriented officers specializing in maintenance, administration, aviation medicine, public affairs and supply fill support positions. The Blue Angels base their selection of officers on professional ability, military bearing and communication skills. Blue Angels officers are well-rounded representatives of their fleet counterparts.

Officers typically serve two years with the team. Blue Angels officers return to the fleet after their tours of duty.

The mission of the Blue Angels is to showcase the teamwork and professionalism of the United States Navy and Marine Corps through flight demonstrations and community outreach while inspiring a culture of excellence and service to country.

#### MESSAGE FROM THE COMMANDING OFFICER

Welcome to the 2022 Blue Angels' season! Since 1946, it has been our honor and pleasure to represent the U.S. Navy and Marine Corps to audiences throughout the U.S. and abroad as we showcase the excitement, precision, and power of naval aviation.

## **Blue Angels**

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Our team consists of 154 world-class, active-duty Sailors and Marines, each one bringing experience and expertise from their service in the fleet. We are honored to serve as the representatives of the more than 800,000 active-duty, reserve, and civilian men and women currently serving worldwide.

Throughout this year, the Navy will celebrate the centennial of the U.S. naval aircraft carrier and its many contributions to national security and our fleet. Our team looks forward to showcasing the cornerstone of airpower operating off U.S. aircraft carriers, the F/A-18 Super Hornet, along with the Marine Corps' premiere logistics support aircraft, the C-130J Super Hercules.

We have the unique ability to highlight the importance of naval aviation while honoring its historical significance. We proudly represent the heritage, agility, flexibility, resilience, and significance of naval aviation to 21st-century warfighting.

We enter our 76th year with a relentlessly positive attitude, strong work ethic, and dedication to the mission. These values have stood the test of time on the Blue Angels and have underscored every performance since the organization's inception. Each member of our team strives daily to ensure the flight demonstration exemplifies the teamwork, professionalism, and precision found in every facet of the U.S. Navy and Marine Corps.

Our team is ecstatic to have the opportunity to continue our community outreach mission and to share our passion for our craft and our country with people around the world.

It is a privilege to perform for you and humbling to represent our fellow service members. We sincerely hope that whether this is the first, second, or 76th year you have seen us fly, the sight and sound of a Blue Angels performance delivers pride in your defense forces, exhilaration, an appreciation for teamwork, and the inspiration to achieve excellence!

It is my pleasure to present your 2022 Blue Angels! Glad to be here!

CAPT BRIAN C. KESSELRING | USN // Flight Leader / Commanding Officer

		REMAINING	2022 SCHE	DULE	
JULY	LY				
2-3	Traverse City, MI	National Cherry Festival Air Show	3-5	Cleveland, OH	Cleveland National Air Show
9	Pensacola Beach, FL	Pensacola Beach Air Show	10-11	Knoxville, TN	Smoky Mountain Air Show
16-17	Ypsilanti, MI	Thunder Over Michigan Air Show	17-18	NAS Oceana, VA	NAS Oceana Air Show
23-24	Milwaukee, WI	Milwaukee Air and Water Show	24-25	MCAS Miramar, CA	MCAS Miramar Air Show
30-31	Dayton, OH	Dayton Air Show	OCTOBER		
AUGUST			1-2	Minden, NV	Aviation Roundup Air Show
6-7	Seattle, WA	Boeing SeaFair Air Show	8-9	San Francisco, CA	San Francisco Fleet Week
13-14	MCAS Kaneohe, Bay, HI	Kaneohe Bay Air Show	22-23	NAS Jacksonville, FL	NAS JAX Air Show
20-21	Chicago, IL	Chicago Air and Water Show	29-30	Houston, TX	Wings Over Houston Air Show
			NOVEMBER		
			5-6	Peachtree City, GA	Atlanta Air Show
Source: <u>U.S. Navy Blue Angels   Show Information</u>			11-12	NAS Pensacola, FL	NAS Pensacola Homecoming Air Show

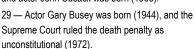
## Just for Fun: June's Notable Events and Famous Birthdays

- 1 Mormon leader Brigham Young (1801), and actors Andy Griffith and Marilyn Monroe (1926) were born, the *Superman* comic was first published (1938), actor Morgan Freeman (1937) and singer Alanis Morissette (1974) were born, and CNN made its debut (1980).
- 2 The Civil War officially ended (1865), PT Barnum's circus made its U.S. debut (1835), Grover Cleveland became the first U.S. president to marry while in office (1886), and actor/comedian Dana Carvey was born (1955).
- 3 Confederate President Jefferson Davis was born (1808), **Ed White became the first American to walk in space** (1965), and TV newsman Anderson Cooper was born (1967).
- 4 The first recorded solar eclipse occurred (780 BC), World War II's Battle of Midway began (1942), actress Angelina Jolie was born (1975), and the Tiananmen Square Massacre took place in China (1989).
- 5 Sax player Kenny G was born (1956), the Six Day War between Israel and an Arab coalition began (1967), Sen. Robert F. Kennedy was assassinated (1968), and President Ronald Reagan died (2004).
- 6 President Andrew Jackson became the first president to ride a train (1833), the first drive-in theater opened (1933), spiritual leader The Dalai Lama was born (1935), and World War II's D-Day began as the Allies invaded the north coast of France (1944).



- 7 Actor Liam Neeson (1952) and musician Prince (1958) were born, and Texas became the first state to make Juneteenth an official holiday (1979).
- 8 First Lady Barbara Bush (1925), actor Jerry Stiller (1929) and comedian Joan Rivers (1937) were born, and the NFL and AFL announced their merger (1966).
- 9 Donald Duck debuted (1934), and sportscaster Dick Vitale (1940), and actors Michael J. Fox (1961), Johnny Depp (1963) and Natalie Portman (1981) were born.
- 10 Benjamin Franklin discovered electricity (1752), singer/actress Judy Garland was born (1922), Alcoholics Anonymous was founded (1935), the ballpoint pen was patented (1943), and **Olympic figure skating champ Tara Lipinski was born** (1982).
- 11 Undersea explorer Jacques Cousteau (1910), legendary football coach Vince Lombardi (1943), actor Gene Wilder (1935) and Hall of Fame quarterback Joe Montana (1956) were born, actor John Wayne died (1979), and the movie *E.T. The Extra-Terrestrial* was released (1982).
- 12 The first perfect game in baseball was pitched (1880), the Philippines declared its independence from Spain (1898), and President George H.W. Bush (1924), Holocaust survivor and author Anne Frank (1929), and sportscaster Marv Albert (1943) were born.
- 13 Comedian Tim Allen was born (1953), the Miranda rights were established (1966) Thurgood Marshall was appointed to the Supreme Court (1967), and twin actresses Mary-Kate and Ashley Olsen were born (1986).
- 14 The U.S. Army was organized (1775), Congress adopted the Stars and Stripes as America's flag (1777); sandpaper was patented (1834), Walt Disney's *Bambi* was released (1942), and President Donald Trump (1946) and singer Boy George (19161) were born.
- 15 The border between the U.S. and Canada was established (1846), and country singer Waylon Jennings (1937), actor Jim Belushi (1954), baseball Hall of Famer Wade Boggs (1958), actresses Helen Hunt (1963) and Courtney Cox (1964), and rapper Ice Cube (1969) were born.
- 16 The first roller coaster in America opened (1884), **the Ford Motor Company was incorporated** (1903), boxing champ Roberto "No mas" Duran was born (1951), and cosmonaut Valentina Tereshkova became the first woman in space (1963).
- 17 The Statue of Liberty arrived in New York City from France (1885), and entertainer Dean Martin (1917), singer Barry Manilow (1946), actress Phylicia Rashad (1948), and tennis star Venus Williams (1980) were born.
- 18 The War of 1812 began (1812), Napoleon was defeated at Waterloo (1815), musician Paul McCartney was born (1942), and Sally Ride became the first American woman in space (1983).

- 19 The first Juneteenth celebration was observed in Texas (1866), baseball Hall of Famer Lou Gehrig (1903) and dancer/singer Paula Abdul (1963) were born, and the Civil Rights Act was passed by Congress (1964).
- 20 West Virginia became a state (1863), the first jet plane was tested (1939), singers Brian Wilson (1942), Anne Murray (1945) and Lionel Richie (1950), actor John Goodman (1952), singer Cyndi Lauper (1953), and actress Nicole Kidman (1967) were born, and the movie *Jaws* premiered (1975).
- 21 The U.S. Constitution was ratified (1788), and actress Meredith Baxter and actor Michael Gross were born (1947).
- 22 **Donuts were invented** (1847), and singer Kris Kristofferson (1936), and actress Meryl Streep (1949) were born.
- 23 The Secret Service was created (1860), Supreme Court Justice Clarence Thomas was born (1948), and the anti-discrimination Title IX education act went into effect (1972).
- 24 Boxing champ Jack Dempsey (1895) and musician Mick Fleetwood (1942) were born, and the Soviet Union began a blockade of West Germany (1948).
- 25 Gen. George Custer and the 7th U.S. Cavalry were wiped out in the Battle of Little Big Horn (1876), singer Carly Simon was born (1945), the Korean War began (1950), and pop star Michael Jackson died (2009).
- 26 Baseball inventor Abner Doubleday was born (1819), the first U.S. troops arrived in France in World War I (1917), the **United Nations was chartered** (1945), the Berlin Airlift began (1948), and singer George Michael was born (1963).
- 27 The Smithsonian Institution was established (1829), Mormon church founder Joseph Smith was killed (1844), the "Happy Birthday" song was first sung (1859), deaf/ mute/blind author/lecturer Helen Keller (1880) and Bob "Captain Kangaroo" Keeshan (1927) were born, and President Truman ordered U.S. troops to Korea (1950).
- 28 The Treaty of Versailles was signed, officially ending World War I (1919), Hall of Fame quarterback John Elway was born (1960), the first U.S. offensive of the Vietnam War began (1965), and actor John Cusack was born (1966).





30 — Daredevil Charles Blondin became the first person to cross Niagra Falls on a tightrope (1859), the novel *Gone With the Wind* was published (1936), and boxing champ Mike Tyson was born (1966).

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