cobec CONSULTING

Schedule Confidence and Acceleration using Deltek Acumen Fuse, Risk, and 360

Nice Schedule – But, can you deliver it six months earlier?

Biography: David Rose

- Industry / Company Employment
  - Cobec Consulting Inc. (2013 – Present)
  - EcoSys Consulting (2010 – 2013)
  - Freescale Semiconductor (1998 – 2010)
- Education / Certification
  - BA, Aviation, Airplane Systems, OSU
  - Commercial Pilot
  - PMP
- Professional Experience
  - Domain Expert, Scheduling, Cobec, various FAA programs
- Something you don't know about me
  - Flew the Fuji Blimp at Oshkosh

Biography: Philip Ashtianie

- Industry / Company Employment
  - Cobec Consulting Inc. (2019 – Present)
  - Interned at National Archives (2010-2012)
- Education / Certification
  - B.S., Business Management and Administration, 2015, UMUC
  - MBA in progress
- Professional Experience
  - Consulting, Scheduling, Cobec, various FAA programs
- Something you don’t know about me
  - Won high school 3A state basketball title in 2007

Introduction

- FAA Acquisition Management System (AMS)
- AMS Schedule-based Deliverables
  - The FAA Investment Planning and Analysis Team Submissions
  - Road-To Joint Resource Council (JRC) Decision Point Milestones
  - Schedule Quality Requirements
  - Risk Adjusted Schedules – 80th Percentile Dates (P80)
- Tools supporting AMS Schedule Based Deliverables
  - Oracle® Primavera P6℠
  - Microsoft Project
  - Deltek Acumen – Thanks for the intro NASA **Schedule Community of Practice (SCoPe)** !
  - Other tools supporting schedule based-deliverables
    - @risk, Steelray, Oracle Risk, ACEIT / JACS
- Schedule Acceleration using Deltek Acumen 360

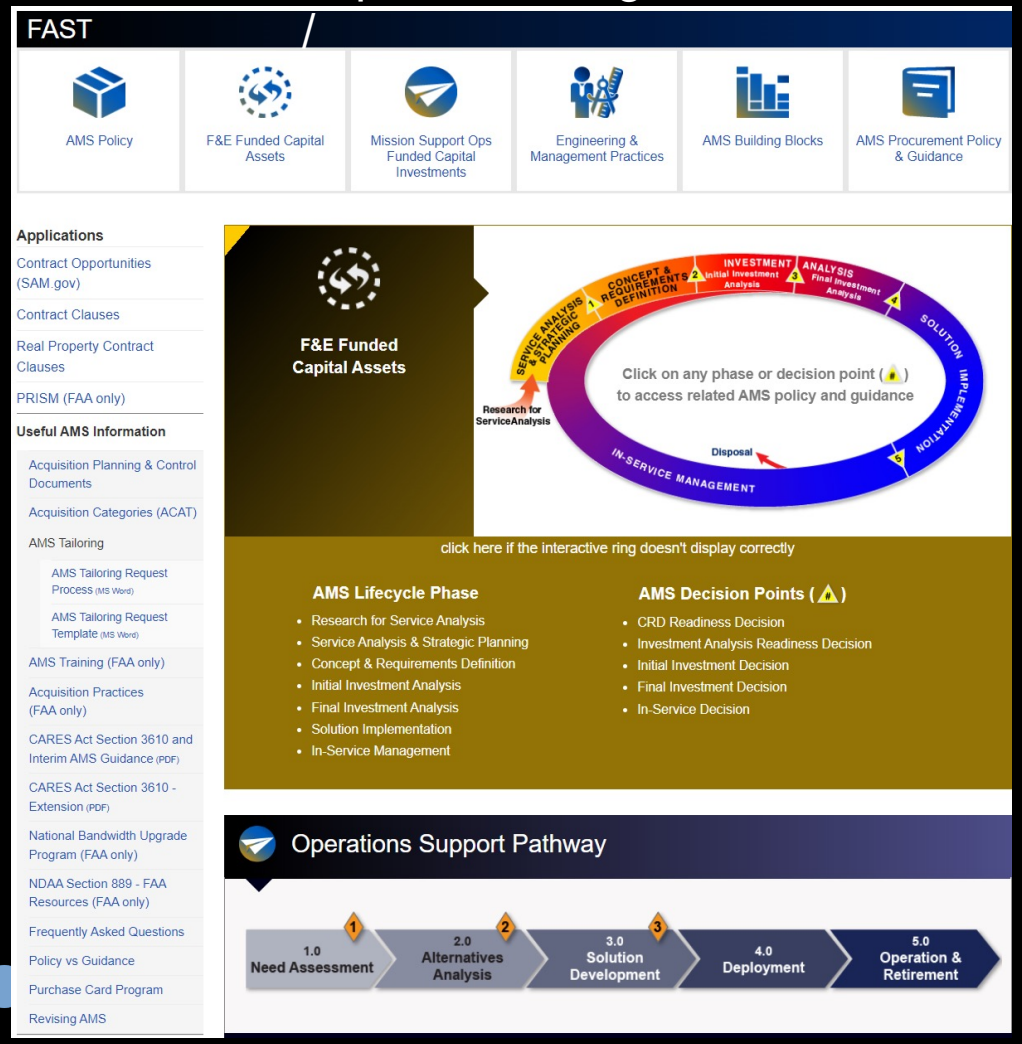
Presentation Outline

- FAA Acquisition Management System and Joint Resource Council and its Relation to NASA's Program Lifecycle Process
- Schedule Preparation as a Deliverable to the FAA's Investment Planning and Analysis team (IP&A)
  - Importing Projects and Mapping Fields
  - Establishing Project Quality / Schedule Quality Confidence / Schedule Quality Reporting
  - Preparing and Reporting the 80th Percentile Dates / Delivering a Risk Adjusted Schedule
- Schedule Acceleration using Acumen 360
  - Accelerating a Schedule Use Case
  - Preparing and Running a Scenario
  - Tailoring Scenarios
  - Comparing Scenarios
- Conclusion
- Questions/Comments

FAA Acquisition Management System

FAA Acquisition System Toolset (FAST/AMS)

https://fast.faa.gov



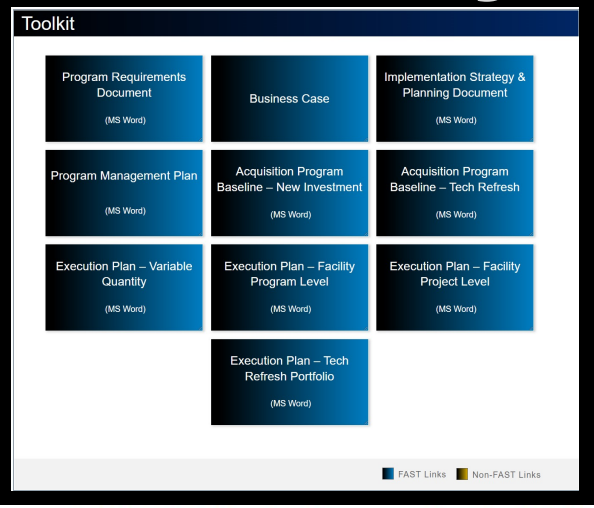
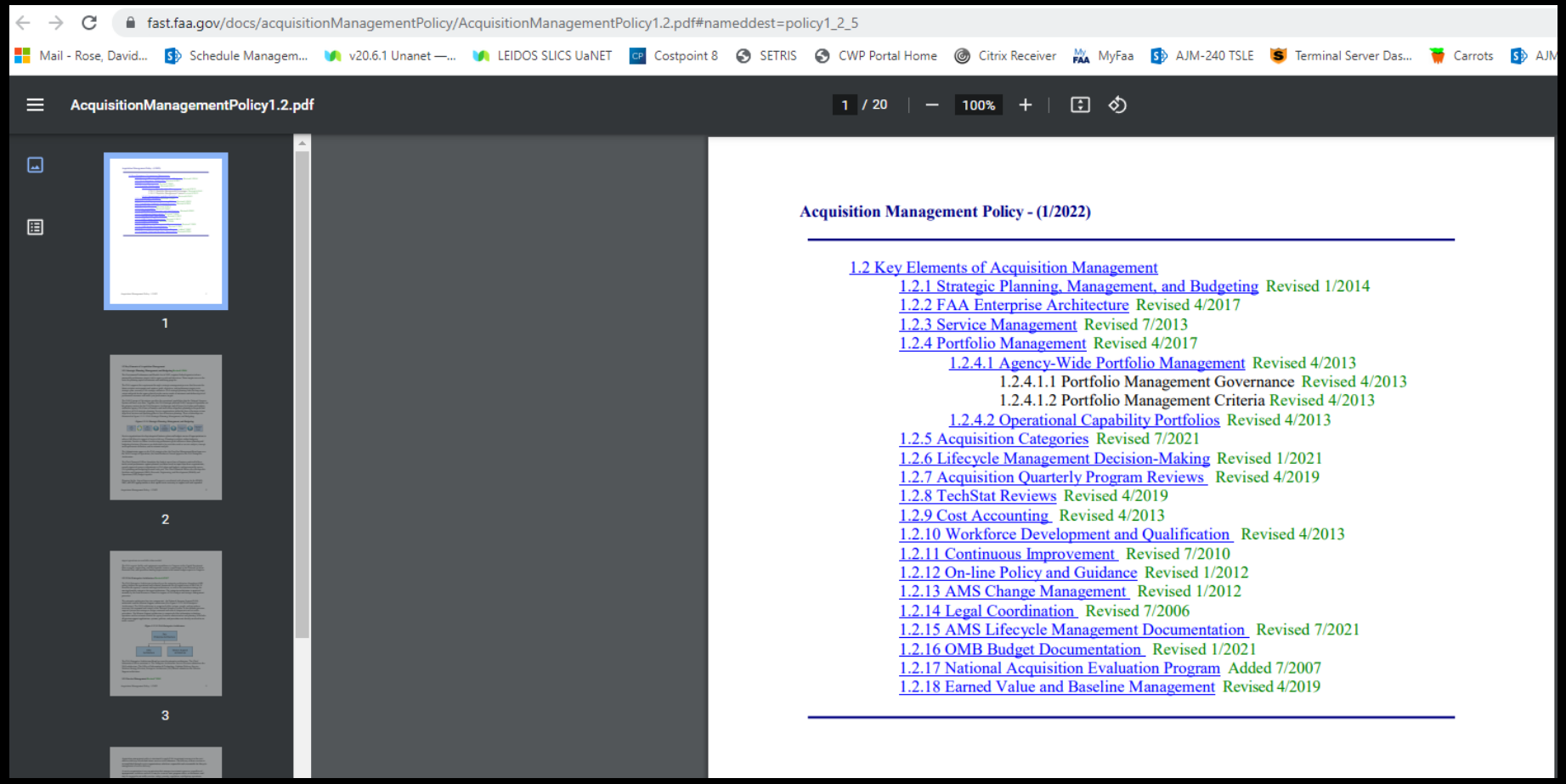


Table 1.2.6-1 Lifecycle Management Decision-Making

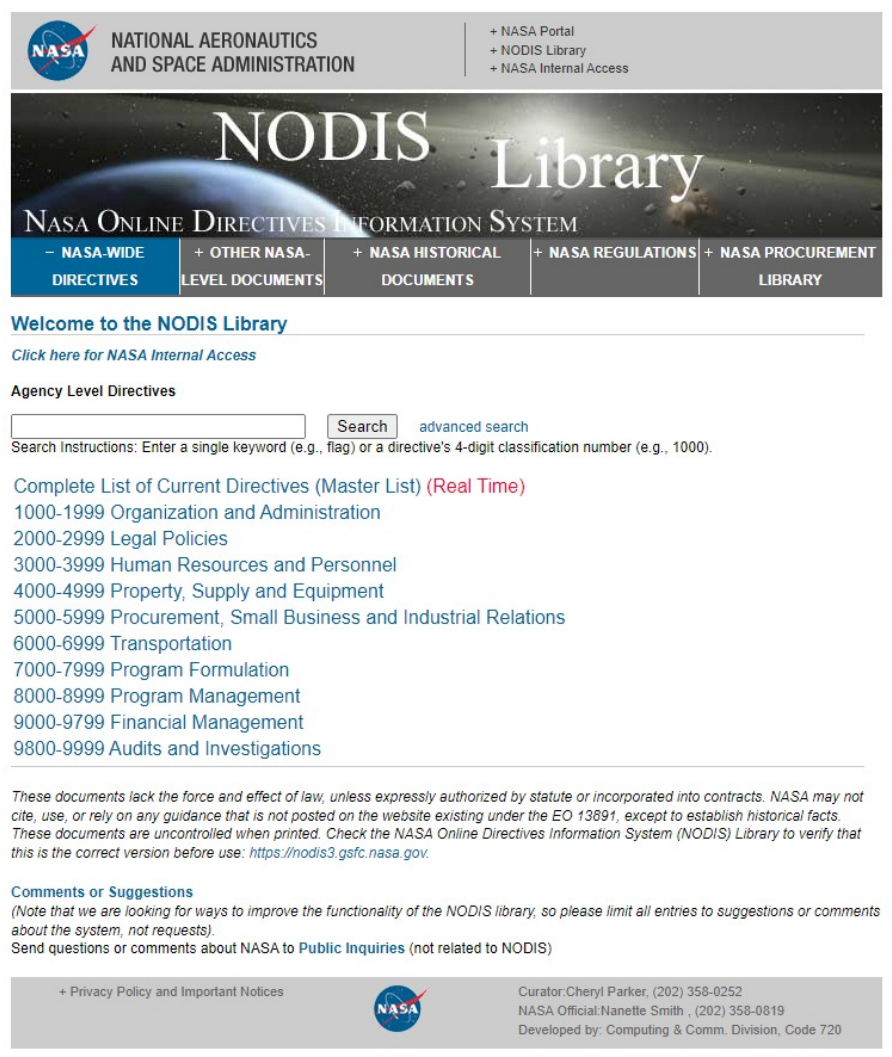
Decision	Decision Body	Decision Chair
Concept and requirements definition readiness decision	FAA Enterprise Architecture Board	None
Investment analysis readiness decision	JRC	Acquisition Executive
Initial and final investment decisions *(including new programs and extension of current capability)*	JRC	Acquisition Executive
Status Update/Strategy Update Session/Direction Requested Decision	JRC	Acquisition Executive
Product demonstration 1	Note 2	Note 2
Production 1 and 2	Note 2	Note 2
In-service 2	Note 2	Note 2
Program baseline change	JRC	Acquisition Executive
F&E, RE&D, and OPS budget approvals	JRC	Acquisition Executive
FAA Enterprise Architecture changes	JRC	Acquisition Executive

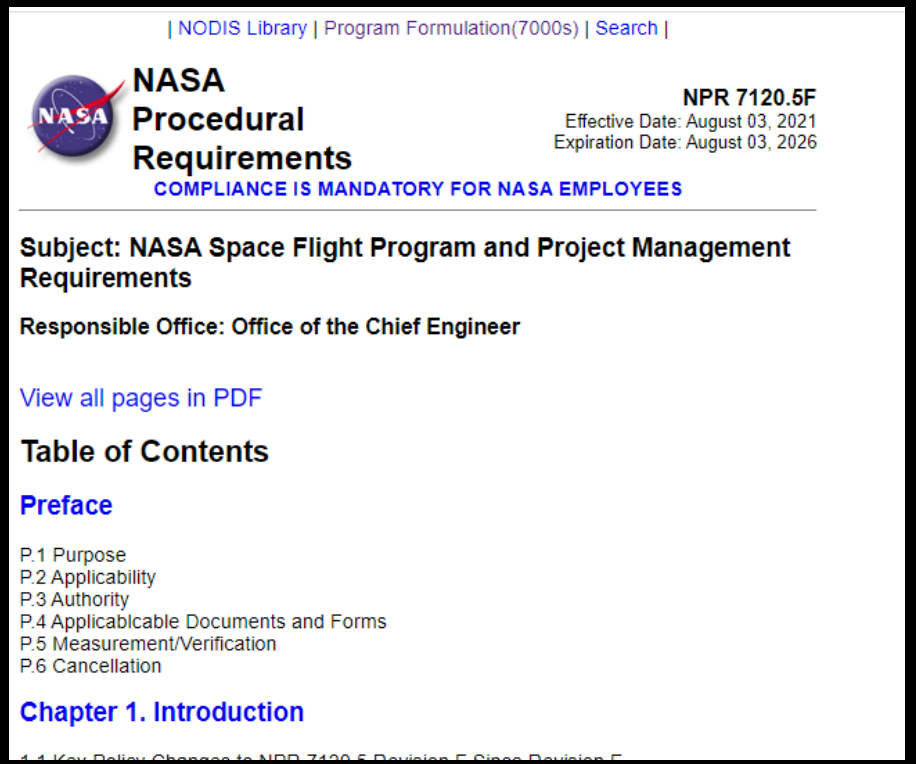
FAA Acquisition Management Policy



https://fast.faa.gov/docs/acquisitionManagementPolicy/acquisitionManagementPolicy.pdf

NASA Online Directives and Procedural Requirements





FAA's Investment Planning and Analysis

Office of Investment Planning & Analysis

What We Do

The Office of Investment Planning & Analysis supports strategic investment decision-making at the FAA by ensuring major capital investments are supported by robust business cases.

- Primarily works within the Concepts & Requirements Definition (CRD) and Investment Analysis (IA) phases of the Acquisition Management System lifecycle;
- Works with the program offices to validate the shortfall the investment plans to address, properly characterize the urgency of the investment, and review the early cost and schedule estimates used to support budget formulation; and
- Performs detailed reviews of the schedule, cost, and benefits estimates for each of the program alternatives, as well as reviewing the overall business case for the investment, including strategic alignment, acquisition and support strategy, risk, and economic return to the public and the Agency.

The Office of Investment Planning & Analysis also oversees the Agency's major contract procurement decisions, ensuring that each contract action is supported by a business case and that pre-award contract planning is adequate.

These analyses assist the agency in prioritizing competing investments and support a number of stakeholders, including the Joint Resources Council for investment decisions, Capital Budget for the establishment of the investment's Acquisition Program Baseline, the Capital Investment Team for the capital budget formulation process, and the acquisition team through procurement oversight and the Independent Government Cost Estimate.

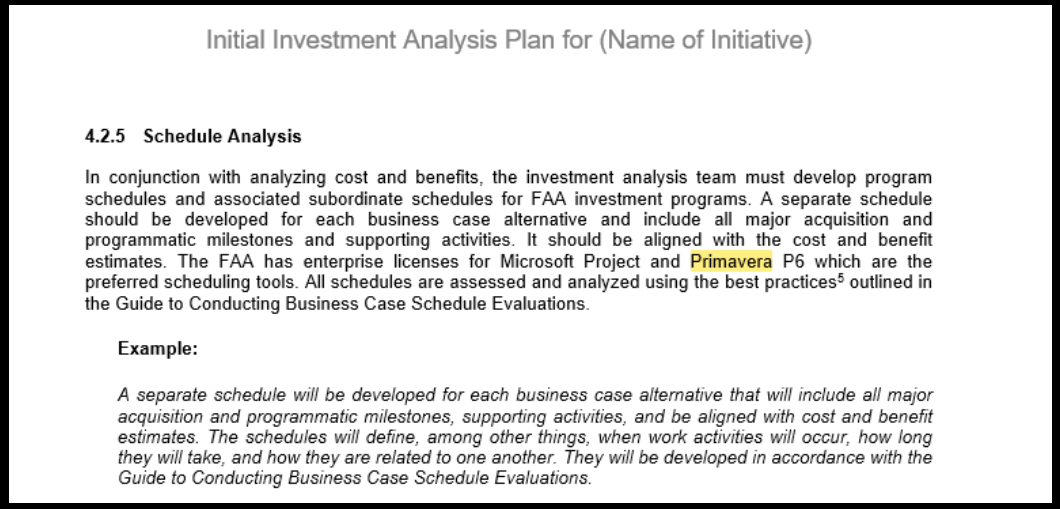
https://www.faa.gov/about/office_org/headquarters_offices/afn/offices/finance/offices/investment_planning

NASA's Investment Analysis

- The Strategic Investments Division, (SID), led by Craig McArthur, provides comprehensive, Agency-level strategic analyses and performance assessments to inform institutional and programmatic investment options and decision-making to accomplish NASA's Mission.
- SID develops strategic guidance, manages processes, and provides in-depth Agency investment and capability analyses for deliverables required during each phase of the annual Planning, Programming, Budgeting and Execution (PPBE) process.
- The division is also responsible for NASA's performance management system, assessing trends, cross-cutting issues, risks, and portfolio/program progress, and providing recommendations and input for planning and budgetary decisions.

Investment Planning and Analysis Deliverables

- FAA's Investment Planning and Analysis
- Schedule Deliverables for IP&A
  - Each Investment Phase has multiple checkpoints with schedule deliverables:
    - "Road To" investment decisions
    - "Waterfall Schedules" i.e., Site Deployment vs. development life cycle (Spiral, Waterfall, Agile etc.)
    - Risk Adjusted Schedules (80th percentile)
    - Cost Schedule Cross-Walks
  - All schedules are quality checked for best practices – DCMA 14 Point
  - All schedules are also scrutinized based on historical projects and "gotchas" and feedback is provided in the form of a Comment Response Matrix (CRM)



Initial Investment Analysis Plan for (Name of Initiative)

4.2.5 Schedule Analysis

In conjunction with analyzing cost and benefits, the investment analysis team must develop program schedules and associated subordinate schedules for FAA investment programs. A separate schedule should be developed for each business case alternative and include all major acquisition and programmatic milestones and supporting activities. It should be aligned with the cost and benefit estimates. The FAA has enterprise licenses for Microsoft Project and Primavera P6 which are the preferred scheduling tools. All schedules are assessed and analyzed using the best practices[5] outlined in the Guide to Conducting Business Case Schedule Evaluations.

Example:

A separate schedule will be developed for each business case alternative that will include all major acquisition and programmatic milestones, supporting activities, and be aligned with cost and benefit estimates. The schedules will define, among other things, when work activities will occur, how long they will take, and how they are related to one another. They will be developed in accordance with the Guide to Conducting Business Case Schedule Evaluations.

Quick Deltek Acumen Demo – Preparing for IP&A

- Schedule Import / Field Mapping
- Schedule Quality Check / Check Results / Output Report
- Preparing and Running a “Risk Adjusted Schedule” scenario with a tailored output report

Schedule Acceleration using Acumen 360

- Accelerating Schedules – a real world scenario – Discussion
- Processing a “schedule challenge” scenario in Acumen 360 Demo
- Tailoring a scenario using custom steps
- Comparing Scenarios
- Preparing a scenario output report to help drive acceleration with program stakeholders
- Examining real-world results of a schedule acceleration exercise
  - What can move
  - What can’t move
  - Stakeholder schedule buy-in
  - Continued what-ifs

Conclusions

- Automation can accelerate the preparation and delivery of schedule deliverables
- Access to tools increases the schedule confidence and quality of deliverables
- Access to the schedule acceleration tools helps drive team communications, problem solving, and stakeholder buy-in
- Easy scenario generation allows many “rocks to be turned over” to try many what if options and measure impact to the overall plan

Questions?