# Challenge Set — Problem Statements

*Twenty-six assignable challenges covering the pursuit pipeline end to end — qualification, capture, production, submission, and the post-submission corridor — plus the v0.5.0 judgment items: AI accountability, oral-rehearsal coaching, and pipeline-forecasting economics. Each is a self-contained working scenario with invented agencies and companies, concrete numbers to anchor the answer, and a deliverable a professional would actually produce. The facilitator's full guidance is in answer-keys.md — do not read it before you produce your deliverable.*

> **How to read a challenge.** Every challenge is structured the same way: **The situation** (the scenario), **The scenario data** (the numbers you will argue with), **What to produce** (the deliverable), and **The discipline in one line** (the doctrine it exercises). The metadata line gives the **tier**, the **time-box**, and the **course/module** the challenge reinforces. Work with the Ravonics case and the worked exemplar open.
>
> **The cast.** The recurring companies and agencies — Helixfield, Granite Peaks, Meridian Anchor, Stonebridge Analytics, Cardinal Point, Northwind Systems, Atlas Run, Blue Heron, Titan Forge, Osprey, and the BCRI / FLC / AVES / NBHA / OARP / DDWI agencies — are all invented. The only real teaching object is **Ravonics LLC**.

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## CH-01 — The Golden No-Bid

**Tier** · Undergraduate · **Time-box** · 60 minutes · **Reinforces** · Doctrine 03–05 · DL 210 · shared-core

### The situation

Stonebridge Analytics is a 12-person analytics shop that just finished its first delivery for the National Border Health Administration (NBHA) — a small, well-reviewed dashboard project. The founder, who lives for the agency's mission, has identified a follow-on opportunity: a multi-year data-engineering contract that would triple the firm's revenue. The numbers look good on the surface, but two members of the capture team are uneasy. The founder wants to move; the two dissenters want to talk about *why* the score passes.

### The scenario data

| Field | Value |
|---|---|
| Estimated contract value | $1,800,000 (4-year IDIQ task) |
| Pursuit cost to compete | $28,000 |

| Field | Value |
| --- | --- |
| Customer relationship factor (weight 25%) | 0.20 — last contact was a status call on the finished dashboard |
| Past performance factor (weight 25%) | 0.35 — one relevant delivery, two unrelated ones |
| Price competitiveness factor (weight 15%) | 0.70 |
| Team / capacity factor (weight 20%) | 0.60 — the firm can staff it, but only by dropping everything else |
| Strategic alignment factor (weight 15%) | 0.50 — adjacent to strategy, not on it |
| Firm threshold (set in advance) | pWin 0.42 **and** composite 0.42 × value |
| Time to bid | 5 weeks |

### What to produce

1. The factor-weighted pWin and the composite score, shown as arithmetic.
2. A BID / BID WITH CONDITIONS / NO BID recommendation with a one-paragraph written defense.
3. A short "what the arithmetic hides" note: which two factors are soft, and what evidence would move them.
4. A one-line statement of who owns the final call and on what basis.

### The discipline in one line

The score is arithmetic; the gate is a decision — a passing score built on the two hardest-to-fix factors is a golden no-bid wearing a bid's clothes.

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## CH-02 — Three Themes and a Discriminator

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · Doctrine 09 · GE 510 / GE 640 · DL 210

### The situation

Northwind Systems wants to pursue a Bureau of Climate Resilience Infrastructure (BCRI) contract to stand up a national flood-risk modeling capability. BCRI is a mission-driven agency that weighs innovation heavily and is publicly tired of "boilerplate proposals that describe capabilities nobody needs." Northwind is technically excellent and administratively mediocre: its management volume has lost points on the last two pursuits. Granite Peaks Federal is the likely incumbent, well-liked, and price-competitive.

**The scenario data**

| Field | Value |
|---|---|
| Evaluation weights (Section M) | Technical 40 · Management 30 · Past Performance 20 · Price 10 |
| BCRI's stated outcomes | Earlier flood warnings · lower false-alarm rate · a single shared data platform |
| Granite Peaks's known profile | Deep staff, comfortable price, slow to adopt new modeling methods |
| Northwind's strengths | Proprietary sensor-fusion model; two published pilots; strong technical bench |
| Northwind's weakness | No named program manager yet; management volume has no credible staffing narrative |
| Time to RFP | 4 weeks; proposal in 10 weeks after that |

**What to produce**

1. Three **win themes** — each stated as the customer's outcome, not Northwind's capability.
2. Two **discriminators** Northwind can credibly claim and Granite Peaks cannot; for each, the evidence that makes it defensible.
3. A scan of the win strategy for **baseline features dressed as discriminators** — list at least two and say why they are baselines.
4. A one-page strategy reading mapping each theme to the evaluation factor it is written to move.

**The discipline in one line**

Win themes are customer outcomes; discriminators move scores, baselines do not — and a proposal is a document written to the evaluation criteria.

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## CH-03 — The Ghost in the Room

**Tier** · Professional · **Time-box** · 90 minutes · **Reinforces** · Doctrine 09 · GE 630 · capture intelligence

**The situation**

Cardinal Point Technologies, a HUBZone-certified small business, is competing for a Federal Logistics Command (FLC) set-aside to run a predictive-maintenance pilot on warehouse robotics. The incumbent is Helixfield

Corporation, which has held the predecessor contract for six years. Helixfield's public record is strong, but the engagement log tells a different story: at last month's industry day, an FLC program officer complained in an offhand remark that the current system "doesn't talk to the maintenance data we already collect." Two Helixfield engineers have been spotted at FLC interviewing for direct-hire roles. Cardinal Point has a system that natively ingests FLC's existing maintenance data.

#### The scenario data

| Field | Value |
|---|---|
| Evaluation weights | Technical 35 · Management 25 · Past Performance 25 · Price 15 |
| Helixfield's record | 6-year incumbent; 4 CPAR-style ratings at "satisfactory"; no "exceptional" in the last 3 years |
| Cardinal Point's evidence | Native integration with FLC's existing maintenance schema (verified in a pre-RFP technical exchange) |
| Industry-day signal | Program officer's offhand complaint about data silos |
| The rule | Ghost themes must never name the competitor |

#### What to produce

1. Two **ghost themes** Cardinal Point can run against the incumbent — each stated as a Cardinal Point strength, each backed by a specific captured engagement event.
2. The **defensive read**: the ghost themes Helixfield is most likely to run against Cardinal Point, and the evidence that would blunt them.
3. A note on which ghost theme you would *drop* if its evidence were only rumor, and why.

#### The discipline in one line

A ghost theme lets the customer draw the conclusion — and it is only as good as the capture intelligence behind it.

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## CH-04 — Reading the Field's Past Performance

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · Doctrine 09 · GE 630 · DL 304 · competitive intelligence

### The situation

Meridian Anchor is deciding whether to pursue a Department of Domestic Water Infrastructure (DDWI) task order under a broad IDIQ it already holds. The capture lead wants a bidder profile of the competitive field — built entirely from the public record: award data, the IDIQ awardee list, and past-performance databases. The team is new to this market and needs to know who the real competitors are, what their records look like, and where the field is soft.

### The scenario data

| Competitor | Award count (3 yr) | Domain match | Incumbency | Known past-performance signal |
|---|---|---|---|---|
| Granite Peaks Federal | 14 | High | None here | Strong on large programs; mixed on small ones |
| Stonebridge Analytics | 3 | Medium | None | One excellent delivery; otherwise thin |
| Helixfield Corporation | 9 | High | Incumbent on the parent contract | 4 "satisfactory", 1 "exceptional" (2 yrs ago) |
| Cardinal Point Technologies | 2 | Medium | None | Small HUBZone; price-sharp; no domain record |
| Northwind Systems | 6 | High | None | Two "exceptional" ratings in adjacent water work |

DDWI signals it values domain-specific past performance above price, and that a "small business participation plan" will be scored.

### What to produce

1. A one-page **bidder profile** for the two strongest competitors, naming their likely win strategy and their soft spot.

2. An **incumbency-pressure assessment**: how much does Helixfield's incumbency matter here, and what neutralizes it?
3. A **recommendation on whom to position against** — and the one competitor Meridian Anchor should *not* try to out-price.
4. A two-sentence note on the public-record boundary: what you used, and what you deliberately did not.

### The discipline in one line

Competitive intelligence is a discipline of the published record — and incumbency pressure is a factor you price and position against, not a wall you accept.

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## CH-05 — The Capture Plan That Has to Survive a Room

**Tier** · Graduate · **Time-box** · 4 hours · **Reinforces** · Doctrine 09 · GE 640 · shared-core · capture

### The situation

Atlas Run Federal intends to bid an Administration for Veterans Employment Systems (AVES) contract to modernize its case-management platform. Atlas Run rarely primes; it usually teams. For this pursuit it has decided to prime, with Osprey Dynamics as its specialist subcontractor. The RFP is expected in nine weeks. The capture lead has assembled the engagement log, a preliminary technical concept, and a competitor sketch — but nothing is written down as a plan. The managing director wants a capture plan she can take to the gate, and she has a standing rule: *if it is not written down, it is not a strategy.*

### The scenario data

| Field | Value |
|---|---|
| Expected award | Up to $4,200,000 over 3 years |
| RFP expected | In 9 weeks; proposal due 6 weeks after release |
| Customer signals | AVES values accessibility compliance, data migration safety, and a named program manager |
| Team | Atlas Run (prime, program management + integration), Osprey Dynamics (specialist data migration) |
| Likely competition | Granite Peaks Federal; Helixfield Corporation; possibly a Blue Heron-led team |

| Field | Value |
|---|---|
| Capture capacity | 1 capture lead, 1 part-time analyst, a shared proposal writer |

#### What to produce

A capture plan with all six parts: the **win strategy** (themes + discriminators + pricing posture), the **customer map** (decision-makers, evaluators, what each cares about), the **solution** (preliminary technical approach), the **team** (who staffs it, what Osprey fills), the **competitive landscape**, and the **engagement plan** (specific contacts, by week, before the RFP). End with the **readiness-gate criteria** — the check the plan must pass before any proposal work starts.

#### The discipline in one line

A capture plan is a written declaration of how the pursuit will be won — choices not made in capture get made in panic during production.

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## CH-06 — Defend This Gate

**Tier** · Professional · **Time-box** · 90 minutes (60 to prepare, 30 live) · **Reinforces** · Doctrine 04 · SI track · gate governance

#### The situation

This is a live gate review. Your team is the capture team for a pursuit you have been handed in mid-stride; the facilitator plays the gate owner — a managing director who is skeptical, out of patience, and knows the numbers. The pursuit is at the **readiness gate** (the checkpoint before proposal production opens). Your job is to present the case and survive the questioning. The gate owner has a documented rule: no emotional appeals, no "we can make it work" — only evidence against criteria written in advance.

#### The scenario data

| Field | Value |
|---|---|
| Estimated value | $2,400,000 |
| pWin (as assembled) | 0.55 |
| Composite score | $1,320,000 |
| Pursuit spend to date | $40,000 |
| Open compliance items | 2 (a personnel substitution and an unresolved subcontractor letter) |

| Field | Value |
|---|---|
| Competitive range (est.) | 3–4 offerors, Helixfield incumbent, price band unknown |
| Time to proposal | 6 weeks |
| Team capacity | 1 capture lead (overstretched), 2 writers, 1 SME part-time |

#### What to produce

1. A **gate-deck** (one page) — trigger, criteria, evidence, and the recommendation (proceed / proceed with conditions / withdraw).
2. A **one-page written defense** of the recommendation, anticipating the gate owner's three hardest questions.
3. (Live) The defense itself, in role, against the facilitator's questions.

#### The discipline in one line

A gate is governance — the criteria were written in advance, the evidence is assembled, and the decision is owned; a defense that cannot answer a fact is a position, not a defense.

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## CH-07 — The Pink Team Finds What the Writers Missed

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · Doctrine 04 · GE 640 · DL 302 · color teams

#### The situation

Granite Peaks Federal is inside the proposal window on a National Border Health Administration (NBHA) contract. The writers believe the draft is nearly done. The proposal manager, who has seen too many near-misses, has ordered a full **Pink Team** review before anything goes to Red. You are the Pink Team: your job is to check the draft against Section L (instructions) and Section M (evaluation) literally, and to produce findings that name the factor, the evidence, and the required revision. The proposal manager has also asked Red Team to score two factors on the same draft. A draft excerpt is provided on the assignment sheet; it contains a number of defects. Some are obvious; some are subtle. Your task is to find them all.

#### The scenario data

| Field | Value |
|---|---|
| Evaluation weights | Technical 40 · Management 30 · Past Performance 20 · Price 10 |
| Page limit (Section L) | 50 pages total, 12-pt font |
| Required certifications | Three; one is agency-specific and easy to miss |
| Key personnel | Two named; the draft substitutes a third person in one section |
| Price | $1,900,000 (Technical volume) vs. $2,150,000 (Cost volume) |
| The rule | Reviewers are independent of writers; findings must be specific |

The draft excerpt (abridged) is handed out with the challenge. It includes a technical section, a management section, a past-performance list, and a pricing note.

### What to produce

1. A **Pink Team report**: every Section L “shall” and its satisfaction point, plus every finding as *factor + evidence + required revision.*
2. A **Red Team score** on the Technical and Management factors, with the four-level rating (Blue / Green / Yellow / Red) and the reasoning.
3. A **disposition line**: is this draft submittable as-is, or which findings block submission?

### The discipline in one line

Pink checks whether anything was left out; Red checks whether what is there would win; and a finding that does not name factor, evidence, and revision is an opinion, not a finding.

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## CH-08 — The RFP That Was Written to Be Misread

**Tier** · Undergraduate · **Time-box** · 90 minutes · **Reinforces** · Doctrine 02 · DL 102 / DL 302 · compliance reading

### The situation

A junior capture analyst at Stonebridge Analytics has been handed a solicitation from the Office of Arctic Resilience Programs (OARP) and told to “build the compliance matrix and flag anything weird.” The analyst reads carefully — and the RFP is genuinely sloppy. Several sections contradict each other, one requirement appears only in an amendment, and a deadline in the body is not the deadline in the portal. A compliance error on this one would kill the pursuit, and the team does not yet know the document is defective. Your job is to find every trap, build the matrix that survives them, and set the deadline plan.

### The scenario data

The RFP summary (abridged) is provided on the assignment sheet. Among its contents:

| Section | What it says |
|---|---|
| Section L | Technical volume: max **50 pages**; proposals submitted via the OARP portal |
| Section M | Evaluators will review the **75-page** Technical volume against the criteria |
| Section L (elsewhere) | Past performance: **max 4 references** |
| Section C | Past performance: **max 3 references** |
| Section A | "Offerors must have an active SAM.gov registration at time of offer" |
| Amendment 2 (issued 3 days after release) | Adds a required agency-specific certification and changes the submission portal |
| Section L (font) | 12-pt font required |
| Template (attached) | The provided template is set in 11-pt font |
| Body text | "Questions are due 2026-09-10; proposals are due 2026-09-24." The portal shows proposals due 2026-09-29 |
| Section J | A data-security acknowledgment form not referenced anywhere else |

### What to produce

1. A **compliance matrix** covering every requirement — including the traps — with the source, the satisfaction point, and an owner.
2. A **"traps found" list**: each contradiction or ambiguity, and the one-line resolution a professional would apply.
3. A **deadline plan** naming the questions deadline, the submission deadline, and the internal deadline you would set.

### The discipline in one line

Compliance is a matrix, not a memory; the two-deadline trap hides an invisible third deadline — and the amendment that changed the portal is the one that kills teams who stopped reading.

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## CH-09 — $240,000 to Win On

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · Doctrine 05 · DL 220 · MBA track · GE 610 / GC 540 · price-to-win

### The situation

Stonebridge Analytics is short-listed for a small NBHA data-integration task. The problem is the budget: the agency has a hard ceiling of $240,000 for 12 months of work, and the evaluation is best-value — the incumbent, Helixfield Corporation, is well-liked and expected to bid near the ceiling. Stonebridge's cost structure is lean but not tiny, and its past performance is one excellent delivery. The firm must decide what to bid: price to win, price to profit, or something between — and defend it as a position.

### The scenario data

| Field | Value |
|---|---|
| Budget ceiling | $240,000 |
| Evaluation | Best value: Technical 40 · Past Performance 30 · Price 30 |
| Stonebridge cost build | 1 senior engineer (900 hrs × $118) + 1 junior (450 hrs × $82) + indirect rate 32% + fee 8% |
| Competitive range (est.) | $215,000–$245,000; Helixfield expected near the ceiling |
| Stonebridge floor (fully loaded) | $189,000 (your calculation to verify) |
| Past-performance signal | One excellent delivery; no domain incumbency |

### What to produce

1. The **cost buildup**: labor, indirect, fee, and total price, shown as arithmetic.
2. The **price-to-win position**: your recommended price, where it sits in the competitive range, and whether it is above or below the floor.
3. A **one-paragraph story** justifying the price as a position — not a guess.
4. A sensitivity note: at what price would you *stop* bidding rather than win at a loss?

**The discipline in one line**

Price is a position set at the intersection of your floor, the competitive range, and what the evaluation rewards — and a too-low bid wins a contract that bleeds you.

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## CH-10 — Two Sides of One Table

**Tier** · Graduate · **Time-box** · 2 hours (45 to prepare, 60 live, 15 to debrief) · **Reinforces** · Doctrine 10 · GE 610 · DL 305 · negotiation

**The situation**

A live negotiation. Meridian Anchor holds a BCRI data-services contract awarded two years ago at fixed rates. BCRI has exercised options twice and now wants to negotiate the optional-period rates down 6%, citing a softer budget. Meridian Anchor's costs have risen 4% since award, and its program manager is the person the agency keeps asking for. Each side enters the room with objectives it will not state. The negotiation is scored on preparation, not on who "wins" — a deal that destroys the relationship is a loss for both sides.

**The scenario data**

| Field | Value |
|---|---|
| Current contract value | $1,600,000 (base + 2 exercised options) |
| Optional period value | $820,000 |
| Current blended rate | $148/hour |
| BCRI's opening ask | $139/hour (−6%) |
| Meridian's floor | $143/hour (below this, the optional period is unprofitable) |
| Known BCRI priorities | Budget certainty; keeping the same program manager; no scope creep |
| Meridian's leverage | The program manager is the reason BCRI exercises options |

**What to produce**

1. A one-page **negotiation prep sheet**: interests, positions, BATNA, ZOPA, reservation price, and the three concessions you would make before the one you would not.
2. (Live) The negotiation itself, with the facilitator playing BCRI's contracting officer.
3. A **post-negotiation memo**: the outcome, what each side actually got, and whether the deal is sustainable.

**The discipline in one line**

Negotiation is the prepared defense of a position built during capture — interests over positions, BATNA over bravado, and a relationship that outlives the deal.

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## CH-11 — The Oral That Almost Won

**Tier** · Undergraduate · **Time-box** · 75 minutes · **Reinforces** · Doctrine 10 · GE 640 · orals

**The situation**

Northwind Systems made the competitive range on a DDWI contract and is invited to a 20-minute oral presentation before the evaluation panel. A recorded rehearsal — which you will watch or read as a transcript — went badly, and the proposal manager wants an honest critique before the real event. The transcript is provided. Four presenters spoke; three rules of orals were broken; one improvisation contradicted the written proposal; and the team ran out of time before its best material.

**The scenario data**

| Field | Value |
|---|---|
| Oral length | 20 minutes, then 15 minutes of Q&A |
| Presenters | 4 (PM, technical lead, program manager, pricing lead) |
| Evaluation factors | Technical 40 · Management 30 · Past Performance 20 · Price 10 |
| The transcript (abridged) | Provided on the assignment sheet |
| Notable moments | The technical lead opens by inventing a “new 10% discount”; the program manager on stage is *not* the named key person; the pricing lead spends 6 minutes on a slide that is not in the deck; the closing theme contradicts the written executive summary |

**What to produce**

1. An **oral critique memo**: every broken rule, named with the evidence from the transcript and the specific correction.
2. A **rehearsal plan**: roles, a stopwatch drill, an external observer playing a hostile evaluator, and a Q&A bank built from the evaluation factors and the risk register.

3. A **fix list** reconciling the oral with the written proposal so no commitment is made on stage that the document does not back.

### The discipline in one line

The oral is the proposal in person — roles pre-decided, practice to a stopwatch, no improvisation of strategy on stage, and the people you proposed.

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## CH-12 — Rebuild the Loss From the Debrief

**Tier** · Doctoral · **Time-box** · 2 weeks (semi-structured) · **Reinforces** · Doctrine 10 · DL 901–903 · learning loop

### The situation

Meridian Anchor lost a Federal Logistics Command (FLC) contract it expected to win. The award went to Granite Peaks Federal. Meridian's leadership requested — and received — a full debrief from the contracting officer. The debrief transcript and the internal record (win strategy, compliance matrix, pWin factors) are provided. The task has two faces. The practitioner face: reconstruct exactly what happened and update the pWin model. The researcher face: this loss is a data point — design the study that would turn a pattern of such losses into generalizable knowledge about the discipline.

### The scenario data

| Field | Value |
|---|---|
| Debrief scoring (Meridian) | Technical 3/5 · Management 4/5 · Past Performance 2/5 · Price 4/5 |
| Debrief scoring (Granite Peaks) | Technical 4/5 · Management 3/5 · Past Performance 5/5 · Price 3/5 |
| Meridian's pWin at bid/no-bid | 0.62 (factor: past performance was scored 0.55) |
| Price comparison | Meridian $2.1M; Granite Peaks $2.25M |
| The debrief's one blunt line | "Your team was excellent; your references did not match the work you proposed." |

### What to produce

1. A **debrief reconstruction memo**: which themes landed, which discriminators were valued, which weaknesses map to which sections, and what the price outcome actually teaches.

2. **Updated pWin factors**: re-score the five classic factors with what the debrief teaches, and state the new composite.
3. (Doctoral) A **study design**: the research question your retrospective would test, the variables you would code from a series of debriefs, and the validity threat in using self-reported debrief data.

### The discipline in one line

The debrief is the highest-information source in the pursuit — and the retrospective is where a lost pursuit stops being a loss and becomes a calibration point.

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## CH-13 — The Cost Volume the Auditor Will Read

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · GC 540 · DL 301 · FAR cost principles / DCAA / CAS

### The situation

Titan Forge Federal is assembling its cost volume for a Department of Domestic Water Infrastructure (DDWI) contract. The pricing lead, rushed and under pressure, has pulled together a cost buildup from a template used on a different, commercial-style job. The controller — who is the one person in the room who has lived through a DCAA audit — looks at the volume and sees several items that would not survive an audit and two that are outright unallowable. The pricing lead says "we can clean it up later." The controller says "the auditor reads what we submit." The assignment: produce the corrected cost volume and the memo that explains each correction.

### The scenario data

| Field | Value |
|---|---|
| Evaluation | Best value; cost realism will be assessed |
| The cost volume (as drafted) | Provided on the assignment sheet |
| Items in the draft | Senior labor (1,200 hrs × $135); a $40,000 "executive incentive tied to award"; a $12,000 industry-conference trip with no agenda; $6,000 in "employee entertainment"; a rate that does not match the firm's disclosed accounting practice; a basis of estimate that is a single sentence per line |

| Field | Value |
|---|---|
| Firm's disclosed practices | CAS-covered; indirect rate audited at 32%; G&A 12% |

### What to produce

1. A **corrected cost volume**: reclassified and re-priced line items, with the firm's actual indirect structure applied consistently.
2. A **memo** identifying every unallowable, unallocable, or unauditable item in the draft, and for each, the FAR cost principle or audit standard it violates.
3. A **basis-of-estimate page** for the two largest labor lines that a DCAA auditor would accept.

### The discipline in one line

The cost volume is the one volume an auditor reads with a rulebook — allowability, allocability, and reasonableness are not cleanup items, they are the deliverable.

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## CH-14 — One Deal, Two Companies, Seven Axes

**Tier** · Graduate · **Time-box** · 3 hours (90 to prepare, 60 live, 30 to document) · **Reinforces** · GE 620 · DL 303 · doctrine 06 · teaming / JV

### The situation

A live two-sided negotiation. Blue Heron Services (a small disadvantaged business) and Northwind Systems (a mid-size engineering firm) want to pursue a Federal Logistics Command (FLC) small-business set-aside. Neither can win alone: Blue Heron has the set-aside eligibility and the past performance in the specific domain, but lacks the technical bench; Northwind has the bench and no eligibility. They must form a teaming arrangement or joint venture and negotiate who primes, how the work is split, how the money is split, and who owns the IP. Each side enters with objectives it will not state. The facilitator plays both sides' counsel, keeping the negotiation honest.

### The scenario data

| Field | Value |
|---|---|
| Estimated contract value | $6,500,000 over 3 years |

| Field | Value |
|---|---|
| Set-aside | Requires the small business to perform 40% of the work and to prime |
| Blue Heron brings | Set-aside eligibility; 2 relevant past performances; program manager |
| Northwind brings | 14-person technical bench; two patented methods; no set-aside eligibility |
| Workshare options on the table | 40/60, 45/55, 50/50 |
| IP question | Northwind's patented methods are central to the technical approach; Blue Heron wants rights to reuse the deliverable |

### What to produce

1. A **term sheet**: prime, workshare, fee split, IP terms, key personnel, exit provisions.
2. A **negotiation outcome memo**: what each side got, what each conceded, and whether the arrangement is built to last the full three years.
3. The **ORBITAL Resources and Budget axes** for the arrangement — the team, the cost structure, and the value, held in one place.

### The discipline in one line

Teaming closes gaps no single firm can close alone — and the deal is only as durable as the structure (workshare, fee, IP) it is written into.

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## CH-15 — From Seven Axes to Four Volumes

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · Doctrine 06 · DL 210 / DL 480 · structure-first

### The situation

Ravonics LLC has a populated ORBITAL for its STTR Phase I pursuit — the exact record a capture team would hold. The proposal writer has been told to produce the four volumes (technical, management, past performance, pricing) and is worried that the ORBITAL, which was built for pursuit governance, may not fully support a compliant submission. Your job is to map the seven axes to the required volumes, find the gaps where the ORBITAL cannot supply what a volume needs, and outline the proposal so every volume is written to a criterion.

**The scenario data**

The ORBITAL record (abridged, seven axes) is provided on the assignment sheet:

| Axis | Record |
|---|---|
| **Objective** | Phase I proof-of-concept digital twin of a distribution feeder; success = demonstrable prototype + credible Phase II thesis |
| **Resources** | 2 PhD physicists, 1 ML engineer, 1 Azure/AWS architect, 1 PM; INSTAR Lab PI + 2 researchers |
| **Budget** | $250,000 award; Ravonics labor $150k; INSTAR subaward $75k; equipment $15k; travel + indirect $10k |
| **Indicators** | Weekly milestone % complete; monthly readiness score; compliance matrix 100% by T−7 |
| **Transport** | STTR Phase I award vehicle; prototype demonstrated to DOE; reporting via the portal |
| **Activities** | 26-week GROWTH arc: gauge → research → organize → write → target → health |
| **Logistics** | SAM active; INSTAR subaward + IP agreement executed; no clearances; portal credentials tested |

RFP volume requirements: Technical (15 pages), Management (no page limit, but must name the PI and the effort split), Past Performance (the record that exists), Pricing (budget + justification on the provided template).

**What to produce**

1. An **axis → section mapping table**: each ORBITAL axis and the volume section(s) it feeds.
2. A **gap list**: what the four volumes require that the ORBITAL does not hold — and where the gap would surface in the review.
3. A **volume outline** showing the four volumes written to the evaluation criteria, in the order the criteria are weighted.

### The discipline in one line

Structure first, document second — the proposal (and the score, and the gates) trace back to the ORBITAL, and a gap in the skeleton is a gap in the submission.

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## CH-16 — The Portfolio and the Line

**Tier** · Undergraduate · **Time-box** · 75 minutes · **Reinforces** · Doctrine 05 · DL 304 · MBA track · scoring

### The situation

Ravonics has a portfolio of five opportunities on the board. The capture lead wants a scored sheet and a gate call for each, using the firm's standing rule: pursue only if **pWin  0.42 and composite  0.42 × value**. The numbers are assembled below. Some are easy calls; two are designed to be hard. Your job is to compute the scores, make the calls, and defend the two hard ones in writing.

### The scenario data

| Opportunity | Value | pWin (factor-weighted) |
|---|---|---|
| A — STTR Phase I (INSTAR partner) | $250,000 | 0.77 |
| B — HUBZone set-aside services task | $180,000 | 0.58 |
| C — Large engineering IDIQ (eligible, unstaffable) | $2,400,000 | 0.30 |
| D — Data-hosting renewal | $120,000 | 0.82 |
| E — New-market entry (no relationship) | $900,000 | 0.18 |

### What to produce

1. A **scored portfolio sheet**: composite for each, pass/fail against the threshold, and the gate call (BID / BID WITH CONDITIONS / NO BID).
2. A **one-paragraph defense** of the two hard calls — the ones where the composite and the judgment pull in different directions.
3. A **portfolio line**: given Ravonics's capacity of one active pursuit, which opportunity advances and which are parked, and why.

**The discipline in one line**

Score = pWin × value, against a line set in advance — the arithmetic makes the conversation honest, and the human makes the call.

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## CH-17 — The Final Proposal Revision

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · Doctrine 10 · GE 640 · FPR

### The situation

Cardinal Point Technologies is in the competitive range on a Federal Logistics Command (FLC) task. The agency has opened discussions and issued a request for a **final proposal revision (FPR)**, attaching its evaluation feedback: three weaknesses, all specific. The original proposal was priced at $1.15M; the FPR instructions set a page limit for changes and hint that the agency is looking for a "sharper price." The adrenaline says *patch fast.* The discipline says treat this as a compressed proposal cycle — the same compliance, theme reinforcement, and review rigor, proportioned to the scope of the change.

### The scenario data

| Field | Value |
|---|---|
| Original price | $1,150,000 |
| FPR page limit for changes | 10 pages |
| Feedback weakness 1 | "The management approach does not name a single accountable program manager." |
| Feedback weakness 2 | "Past performance references are only marginally relevant to the statement of work." |
| Feedback weakness 3 | "Price is above the competitive range; sharpen or justify." |
| Cardinal Point's floor | $1,020,000 (below this, the task is unprofitable) |
| Time to FPR deadline | 12 days |

### What to produce

1. An **FPR strategy memo**: exactly what changes, what stays, and why — item by item against the three weaknesses.
2. A **revised price position** with the justification, and the line you will not cross.

3. A **review plan** for the 10-page revision: which color passes run, who reviews, and how the final package is verified before the deadline.

#### The discipline in one line

An FPR is a compressed proposal cycle, not a patch job — the team that slaps pages on while a competitor re-runs its review discipline is the team that loses in the final round.

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## CH-18 — Rescue the Derailed Pursuit

**Tier** · Doctoral · **Time-box** · 2 weeks (semi-structured) · **Reinforces** · Doctrine 03 / 04 · GC 520 · organizational theory

#### The situation

A pursuit at Atlas Run Federal has gone off the rails. The capture lead left mid-cycle; the compliance matrix is half-built; two internal deadlines were missed; the writers are drafting against an outline nobody approved; and the managing director has just discovered the pursuit was never scored — the original bid/no-bid was a hallway yes. The proposal is due in four weeks. The assignment has two faces. The practitioner face: diagnose the derailment against the pipeline and gates, and produce a recovery plan. The researcher face: this is a case study in organizational failure — design the analysis that would turn a pattern of derailments into generalizable lessons about pursuit governance.

#### The scenario data

| Field | Value |
|---|---|
| Proposal due | In 4 weeks |
| Time lost to date | 3 weeks of the 9-week production window |
| Compliance matrix | 40% built; two "shall" items confirmed missing |
| Scoring | Never performed; no bid/no-bid record |
| Team state | 1 overstretched capture manager, 2 writers, 1 SME with 6 hours/week |
| Remaining budget for production | $12,000 |
| The hard question | Do we rescue this pursuit, restart it, or withdraw — and on what criteria? |

**What to produce**

1. A **root-cause analysis**: where the pipeline and gate discipline broke, mapped to the specific failure.
2. A **recovery plan**: stop / restart / cut-scope decision with criteria, a re-entry gate, a rebuilt matrix, and a staffing fix.
3. (Doctoral) A **research framing**: the case as a data point — the variables you would code, the counterfactual, and what a series of such cases would test about the discipline.

**The discipline in one line**

A pursuit survives on its gates — and a derailed pursuit is recovered by re-running governance, not by sprinting to the deadline.

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## CH-19 — The Portal Closes at Five

**Tier** · Undergraduate · **Time-box** · 60 minutes · **Reinforces** · Doctrine 02 · DL 302 · submission mechanics

**The situation**

It is submission day at Stonebridge Analytics. The team planned to upload by 4:10 PM for a 5:00 PM ET deadline. At 4:10 the upload begins; at 4:18 the portal returns a file-validation error: one attachment exceeds the size limit and a required form is missing. The capture lead is on the phone with the contracting officer, who is sympathetic but reminds the team the portal closes mechanically at 5:00. Panic is building. Your job is to run the incident — decide what to do in the next forty minutes, document every move, and then write the post-mortem that makes sure it never happens again.

**The scenario data**

| Field | Value |
|---|---|
| Submission deadline | 5:00 PM ET, portal closes mechanically |
| Upload start | 4:10 PM |
| Validation error | One attachment 12 MB over the 50 MB limit; a signed form missing from the package |
| Available people | Capture lead, one writer, one admin (all in the room) |
| Amendment 3 (posted 2 days ago) | Changed the required form's revision date — the team used the old form |

| Field | Value |
|---|---|
| The trap | The internal deadline was set for "the day before," but nobody re-verified the package after Amendment 3 |

**What to produce**

1. An **incident log**: the timeline, every action taken, who did what, and the moment of submit (or the decision not to).
2. A **one-page post-mortem** naming the root cause and the three process fixes that prevent a repeat.
3. A two-sentence **statement of the invisible third deadline** and why it exists.

**The discipline in one line**

Submission is mechanical and unforgiving — the internal deadline exists to absorb exactly this kind of day, and the amendment that changes a form is the amendment that catches you.

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## CH-20 — Four Opportunities, One Team

**Tier** · Graduate · **Time-box** · 2 hours · **Reinforces** · Doctrine 03–05 · SI track · MBA track · portfolio

**The situation**

Ravonics has capacity for **one active pursuit** and a limited capture budget — this is the firm's real constraint, not its ambition. Four opportunities have surfaced in the same week. The capture lead wants a portfolio recommendation that can be defended to the founder at the next gate: which one advances, which are parked, and which are declined *in writing* — because a disciplined "no" is a professional outcome, not a failure.

**The scenario data**

| Opportunity | Value | pWin | Fit (1–5) | Capture cost | Capacity cost |
|---|---|---|---|---|---|
| STTR Phase I (INSTAR partner) | $250,000 | 0.77 | 5 | $8,000 | Full (one active pursuit) |

| Opportunity | Value | pWin | Fit (1–5) | Capture cost | Capacity cost |
|---|---|---|---|---|---|
| HUBZone set-aside services task | $180,000 | 0.58 | 4 | $6,000 | Full |
| Large engineering IDIQ task | $2,400,000 | 0.30 | 3 | $25,000 | Full (would need hires) |
| Quick data-hosting renewal | $120,000 | 0.82 | 4 | $3,000 | Light |

#### What to produce

1. A **ranked portfolio recommendation** with the gate reasoning at each rung (eligibility → score → capacity).
2. A **written no-bid defense** for the opportunity you decline — the one that looks attractive but should not advance.
3. A **portfolio view**: how the one active pursuit plus the light-touch renewal allocates the firm's scarce attention.

#### The discipline in one line

Capture capacity is finite — a portfolio is a deliberate allocation of scarce attention, and the disciplined "no" is how you protect the resources the winning pursuit needs.

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### CH-21 — The Customer Who Has Never Heard of You

**Tier** · Professional · **Time-box** · 90 minutes · **Reinforces** · Doctrine 09 · shared-core DREAM accent · capture engagement

#### The situation

Cardinal Point Technologies has identified a strategic target: the Office of Arctic Resilience Programs (OARP) is expected to release a research-and-modeling solicitation in six months, and Cardinal Point has the exact capability. There is one problem: OARP has never heard of Cardinal Point. The window before the RFP is the only time the firm can make itself known, learn what the agency actually values, and gather the evidence a win strategy needs. The capture director wants a six-month engagement plan framed in the DREAM accent —

Discover, Relate, Empower, Advise, Motivate — with specific contact targets and the intelligence each contact is meant to gather.

**The scenario data**

| Field | Value |
|---|---|
| RFP expected | In 6 months |
| Customer's published priorities | Arctic data gaps; research credibility; a willingness to "work with new partners" |
| Industry-day schedule | One public industry day in month 3; two technical exchanges possible |
| Competitor signal | Granite Peaks has already requested three meetings with OARP program staff |
| Cardinal Point's assets | A relevant published paper; a HUBZone certification; one domain-adjacent past performance |
| Cardinal Point's gap | No relationship; no OARP-specific ghost-theme evidence |

**What to produce**

1. A **six-month engagement plan** mapped to the DREAM accent, with at least one specific, named contact per month.
2. For each engagement, the **intelligence objective** — what signal you are trying to collect, and what evidence would become a ghost theme.
3. A **relationship-risk note**: what happens if OARP engages Granite Peaks and not you, and the backup path.

**The discipline in one line**

Capture is measured in customer contact, not slide decks — and a pursuit that is not actively engaged decays before it is ever written.

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## CH-22 — The Executive Summary That Must Carry the Ship

**Tier** · Graduate · **Time-box** · 2 hours · **Reinforces** · Doctrine 02 / 09 · GE 640 · proposal strategy

#### The situation

Meridian Anchor's executive summary is the only volume every evaluator is guaranteed to read — and on the last two pursuits, reviewers have admitted they read the executive summary "and skimmed the rest." The proposal manager wants an executive summary that carries the whole ship: it must state the win themes in the order the criteria are weighted, plant the discriminators, and stand alone as a document a busy evaluator could act on. The constraint is brutal — one page, maximum, and it has to survive a compliance check on formatting.

#### The scenario data

| Field | Value |
|---|---|
| Evaluation weights | Technical 40 · Management 30 · Past Performance 20 · Price 10 |
| Win themes | 3 (from CH-02's scenario: earlier warnings, lower false-alarm rate, one shared platform) |
| Discriminators | 2 (proprietary sensor-fusion model; two published pilots) |
| Price posture | Mid-range, defensible for best value |
| The past-performance problem | Thin domain record — must be addressed, not hidden |
| Format | 1 page, 12-pt, the agency's template |

#### What to produce

1. A **one-page executive summary** that mirrors the criteria order, threads the three themes, plants the two discriminators, and handles the past-performance weakness.
2. A **one-paragraph note** on what you had to cut, what you decided to lead with, and why.
3. A two-line **compliance check**: how you verified the page limit and format rules.

#### The discipline in one line

The executive summary mirrors the evaluation in miniature — themes in criteria order, discriminators planted, and a page limit respected as a hard rule, not a suggestion.

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## CH-23 — The Agent's 0.62

**Tier** · Graduate · **Time-box** · 2 hours · **Reinforces** · Doctrine 03–05 · `modules/human-ai-collaboration.md` · AI accountability

**The situation**

Cardinal Point Technologies has started running its capture through an AI capture agent. For a new research NOFO from the Office of Arctic Resilience Programs (OARP) — a $400,000 one-year award — the agent returns a bid/no-bid memo recommending **BID** with a factor-weighted pWin of **0.62** and a one-page capture plan. The memo is polished and internally consistent. But Cardinal Point's capture director has a standing rule: *the agent computes, you decide the facts* — and she has handed the memo to you with the firm's real record beside it, asking for the review before the readiness gate. The memo is plausible. It is also wrong in two specific places.

**The scenario data**

| Field | Value |
|---|---|
| NOFO value | $400,000 (1-year research award) |
| AI's computed pWin | 0.62 |
| Firm threshold (standing rule) | pWin  0.42 **and** composite  0.42 × value |
| AI's factor weights | topic fit 25% · team 20% · past performance 20% · price/cost 20% · capacity 15% |
| AI's factor scores | topic fit 0.80 · team 0.70 · past performance **0.60** · price/cost 0.40 · capacity 0.50 |
| AI's past-performance citation | "2024 OARP-funded sea-ice forecasting study delivered by Cardinal Point" |
| AI's compliance statement | "No cost share required." |
| The real record (case file) | One domain-adjacent analytics delivery for a state agency; **no OARP contract exists in the published award record** |
| The NOFO's actual terms | **Mandatory 25% non-federal cost share**; a bid without a committed match is rejected without evaluation |

**What to produce**

1. An **override log**: every place you changed the agent's output, with what the agent computed, what you changed it to, the evidence that justified the change, and whether each override is a *correction* (the agent was wrong) or a *judgment call* (the agent was reasonable; you decided differently).
2. The **re-scored pWin** shown as arithmetic (factor by factor) and the new composite against the threshold.

3. The **bid decision**: BID / BID WITH CONDITIONS / NO BID, with a one-paragraph defense and the conditions stated explicitly.
4. A two-line **division of labor** note: what the agent computes and what the human owns.

#### The discipline in one line

AI accountability — the agent computes the arithmetic, but the human owns the facts; a pWin built on a fabricated reference and a skipped compliance check is a hallucination wearing a score's clothes.

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## CH-24 — The Ghost Pass That Missed the Collision

**Tier** · Professional · **Time-box** · 90 minutes · **Reinforces** · Doctrine 04 / 09 · `modules/human-ai-collaboration.md` · AI-accountability color teams

#### The situation

Northwind Systems is inside the proposal window on the Bureau of Climate Resilience Infrastructure (BCRI) flood-risk contract (the same pursuit as CH-02). The proposal manager has begun running color-team passes through an AI red-team agent to save time. The AI's pass returns a finding log: it flags two real issues and looks thorough. The proposal manager — who has lived through enough near-misses — reads the log and then reads the draft's win-themes section herself, and she is not satisfied. She asks you to **re-run the ghost pass** by hand and reconcile your findings with the agent's. The agent missed something. Two somethings.

#### The scenario data

| Field | Value |
|---|---|
| Evaluation weights (Section M) | Technical 40 · Management 30 · Past Performance 20 · Price 10 |
| The AI pass's findings | (1) "ISO 9001 called a key discriminator — baseline, not a discriminator." (2) "Section L 'shall' for a Transition-In Plan has no home in the outline." |
| Ghost theme A (draft, Technical section) | "Unlike **Helixfield Corporation's** siloed flood platform, our sensor-fusion model unifies data across every BCRI office." |

| Field | Value |
|---|---|
| Ghost theme B (draft, Management section) | "The team we propose is the team that stays — no turnover through the life of the contract." |
| Evidence behind theme B | A rumor that Helixfield's key PM is leaving; **no captured engagement event** supports it |
| Evidence behind theme A | BCRI's industry-day complaint about data silos (a real, captured signal) |
| The ghost-theme rules | Ghost themes must never name the competitor; a ghost whose only evidence is rumor must be dropped |

### What to produce

1. The **re-run ghost pass**: the two ghost-theme findings the AI pass missed, each written as *rule + evidence + correction*.
2. The **override log**: the AI's finding log vs. your re-run — what the agent found (and whether it stands), what it missed, and the classification of each override as a *correction* or a *judgment call*.
3. A **disposition line**: which findings must be resolved before the draft reaches Red, and why.

### The discipline in one line

An AI color pass is a first pass, not a replacement for the human eye — ghost themes are only as good as the capture intelligence behind them, and a pass that certifies a named-competitor attack and a rumor-built theme has certified a liability.

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## CH-25 — The Rehearsal That Met the Hostile Room

**Tier** · Graduate · **Time-box** · 2 hours (60 to prepare, 60 live, 30 to debrief) · **Reinforces** · Doctrine 10 · `modules/graduate/elective-orals-coaching.md` · orals

### The situation

This is a **live oral rehearsal**. Meridian Anchor has made the competitive range on the BCRI flood-risk oral and the proposal manager has ordered a full rehearsal before the real event. Your team of four presents the 20-minute oral agenda (technical lead opens with the model, the program manager covers management, the pricing lead covers price, the delivery lead covers the transition); then the facilitator — playing a **hostile evaluator** — runs a 15-minute Q&A

from a planted bank built to probe the proposal's weakest seams. The team is scored against the orals-coaching rubric. The rehearsal is the deliverable's raw material: your job is to run the room, capture what happens, and produce the critique that makes the real oral survivable.

**The scenario data**

| Field | Value |
|---|---|
| Oral length | 20 minutes, then 15 minutes of Q&A |
| Presenters | 4 (technical lead, program manager, pricing lead, delivery lead) |
| Evaluation factors | Technical 40 · Management 30 · Past Performance 20 · Price 10 |
| The planted Q&A bank (facilitator's) | A price probe on a discount the pricing lead hints at; a past-performance probe on reference relevance; a key-personnel probe (the PM on stage is not the named key person); a contradiction probe on the closing theme vs. the written executive summary |
| The team's known weak seams | Thin domain past performance; a named PM who is a new hire; a price position that must not be improvised; a closing theme that must match the written document |

**What to produce**

1. The **rehearsal scorecard**: each presenter and the team scored against the orals rubric, with the evidence from the run.
2. The **feedback memo**: every rule broken (named with the moment), every commitment made on stage that the written proposal must back, and the one improvisation to kill before the real oral.
3. The **fix list**: the specific changes before the real event — re-routing price questions, reconciling key personnel, freezing the deck, rebuilding the closing theme — plus the revised Q&A bank.

**The discipline in one line**

An oral is rehearsed, not performed — roles pre-decided, practice to a stopwatch, a hostile Q&A bank that probes the written proposal's weakest seams, and no commitment made on stage that the document does not back.

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## CH-26 — The Pipeline Under the Budget Ceiling

**Tier** · Graduate · **Time-box** · 3 hours · **Reinforces** · Doctrine 05 · `modules/graduate/pipeline-economics.md` · portfolio forecasting

### The situation

Stonebridge Analytics holds a weighted pipeline of six opportunities and a fixed **BP (business-pursuit) budget of $50,000 for the year**. The BD director wants a portfolio allocation that maximizes expected value under the ceiling: which opportunities to fund (bid), which to defer, and which to decline — justified with expected-value math, not headline values. The firm's standing rule applies to every bet: **pWin  0.42 and composite  0.42 × value**. The director has seen one too many teams rank the pipeline by the size of the dollar figure; she wants the arithmetic on the table and the gates defended.

### The scenario data

| Opportunity | Value | pWin | Pursuit cost |
|---|---|---|---|
| A — Data-hosting renewal | $120,000 | 0.82 | $3,000 |
| B — STTR Phase I (INSTAR partner) | $250,000 | 0.77 | $8,000 |
| C — HUBZone set-aside services task | $180,000 | 0.58 | $6,000 |
| D — New-market entry (no relationship) | $900,000 | 0.18 | $15,000 |
| E — Large engineering IDIQ (eligible, unstaffable) | $2,400,000 | 0.30 | $25,000 |
| F — Mid-size follow-on | $400,000 | 0.50 | $10,000 |

### What to produce

1. The **pipeline forecast**: weighted pipeline value, expected win count, and per-opportunity expected value and net expected value (EV − pursuit cost), shown as arithmetic.
2. The **budget allocation**: the funded portfolio under the $50,000 ceiling with the knapsack reasoning — including the marginal swap you made to

fit the budget — and the deferred/declined list with the expected-value *and* threshold justification.

3. A one-paragraph **defense of the tension**: where the expected-value math and the threshold discipline pull in different directions (the large IDIQ), and the decision you made.
4. A two-line **reserve note**: whether you spent the full budget, and why.

### The discipline in one line

The pipeline is a forecast, not a plan — expected value tells you where the money statistically lands, the gate tells you which bets you are allowed to make, and a budget is a ceiling, not a mandate to spend.

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*That is the set — twenty-six challenges from the first bid/no-bid to the final proposal revision, plus the v0.5.0 judgment items. Produce the deliverables, then check yourself against the answer keys.*