CANDIDATE INFORMATION

Name	Richard Hyde
Title	Principle Engineer
Organization	Applied Research Associates
Organization Type	Large Business
Address	4300 San Mateo Blvd NE, Suite A-220 Albuquerque, NM 87110
Email	rhyde@ara.com
Phone	

CANDIDATE STATEMENTS

Explain how your background, training, experience and/or personal qualities support your candidacy to assume a governance position on the Executive Committee. Provide resume as a separate attachment.

With over 38 years of experience in the aerospace and defense industry-spanning solid rocket motors (SRMs), air-delivered munitions (ADMs), and integrated systems health management-I bring a comprehensive and mission-focused perspective to the Executive Committee. My career has included key leadership positions in engineering, program management, R&D, and business development, with sustained emphasis on innovation, sustainment, and strategic growth.

I have successfully led multidisciplinary teams on high-visibility programs for the Department of Defense, including the Minuteman Propulsion Replacement Program and the capture and execution of major sustainment efforts. My technical background (B.S. and M.S. in Structural Engineering) is matched by practical leadership experience in translating complex requirements into executable solutions and advancing technologies from concept through transition.

As an industry-recognized expert in SRM health management and a long-standing participant in Joint Army, Navy, NASA, Air Force (JANNAF) subcommittees, I have a deep appreciation for collaborative government-industry frameworks. I've also demonstrated a sustained commitment to mentoring and STEM engagement, reflecting a belief in cultivating the next generation of talent.

These qualifications-combined with my reputation for integrity, technical credibility, and strategic insight-position me to make meaningful contributions to the Executive Committee and its mission to support national defense priorities.

What do you see as the most significant challenge(s) facing the business type you will represent and how would you propose to address those challenges if elected?

One of the most significant challenges facing mid-sized, technically advanced businesses like Applied Research Associates (ARA) is the ability to consistently transition from subcontractor roles to prime positions within the DOTC framework. While companies like ours bring deep domain expertise, strong internal R&D pipelines, and a proven track record supporting national defense priorities, structural barriers-including limited direct visibility with program sponsors, constrained teaming flexibility, and risk-averse prime contractor dynamics-often limit our opportunity to lead or independently shape innovative solutions.

Additionally, for organizations that straddle the line between small business flexibility and large business overhead, navigating the DOTC ecosystem efficiently can be a resource-intensive endeavor. Challenges in timely access to solicitations, clarity of scope, and alignment between customer expectations and project feasibility can disproportionately impact mid-sized firms.

If elected to the Executive Committee, I would advocate for increased engagement mechanisms that elevate the visibility and input of mid-tier members. These could include targeted matchmaking forums during Industry Days, working groups focused on prime/sub dynamics, and increased transparency around how smaller and mid-sized businesses can better position themselves for leadership roles. I would also support efforts to streamline the OTA submission and feedback processes, enabling responsive and iterative proposal cycles that play to the strengths of agile, innovation-focused companies like ARA.

By addressing these challenges, we can enhance the diversity of technical contributions within the NAC and ensure that high-impact, cost-effective solutions-regardless of business size-reach the warfighter faster.

Please describe the importance of the NAC to your organization and provide a synopsis of the participation in NAC/DOTC since becoming a member (e.g., number of proposal submissions, awards, industry days and membership meeting attended).	The National Armaments Consortium (NAC) plays a strategic role in our organization's ability to deliver innovative, defense-relevant technologies to the Department of Defense. It provides a critical bridge between ARA's applied research capabilities and the warfighter's evolving needs, allowing for rapid alignment of technical innovation with operational priorities. Since becoming a member, I have personally participated in three DOTC proposal efforts-each of which was awarded. I served as Program Manager on the first two projects, overseeing successful execution and delivery, and was later awarded a three-year extension to the second effort due to its continued value to the customer. The third project, also awarded, was captured shortly before my transition from that organization to ARA. I have also attended one NAC Industry Day, which provided meaningful opportunities to engage directly with government stakeholders and teaming partners. Our continued participation in the NAC reinforces ARA's commitment to national security innovation, collaboration across the defense ecosystem, and delivering real solutions to the field.

WILLINGNESS TO SERVE CERTIFICATION

Signature	
Date	06/19/2025

R. SCOTT HYDE

SUMMARY

Aerospace Professional with extensive background working with multi-disciplined technical and program teams focused on improving solid rocket motor (SRM) and air delivered munitions (ADM) performance and performance prediction capabilities. Well-developed writing, presentation, leadership, and communication skills. Proven ability to synthesize complex requirements into manageable work packages. Consistent record of securing new domestic and foreign business and meeting or exceeding customer expectations. Expertise in developing and growing SRM and ADM business including system requirements development, planning, technical team management, business development, strategy and marketing. Recognized for ability to build and manage high performance teams that cross company and customer boundaries.

QUALIFICATIONS SUMMARY

- 38 years of Aerospace experience focused on SRM and ADM related efforts, 33 years in leadership positions (Program Manager - 13 years, Business Development - 3 years, Senior Scientist – 4 years, R&D Department Manager - 7 years, Minuteman Chief Engineer - 6 years and Structural Analyst - 5 years).

- B.S. and M.S. Degrees, Structural Engineering, Utah State University.

- Developed strategy and business development plans for key pursuits.

- Developed entrance and capture strategies to new market opportunities that minimized investment and maximized business growth potential.

- Performed as capture and proposal manager for numerous successful proposals.

- Experienced in preparing and presenting all levels of technical information to customers and management.

- Recognized expert in the Aerospace Industry and Government sectors for Integrated Systems Health Management.

- Technical lead for Minuteman Propulsion Replacement Program Service Life Working Group and established first service life estimates for SRM Stages 1, 2 and 3.

- Developed business strategy and managed service life determination of foreign military owned tactical missiles.

- Demonstrated ability to work with and enhance customer relationships.

- Served on a variety of Conference Program Committees and Technical Steering Groups, and as Chairperson for many technical conference sessions.

- U.S. Government Security clearance: Secret can qualify to Top Secret

CAREER OVERVIEW

Northrop Grumman Innovation Systems
Brigham City, UT

SENIOR PROGRAM MANAGER – ADVANCED PROGRAMS Apr 2018 - Present

Responsible for the technical, cost, schedule and marketing of advanced technologies relating to SRMs and ADMs. Duties included being the primary customer interface, maintaining focus on current programs to ensure successful completion and provide vision for future advancements to customers and management. Provide direction and leadership for integration of multiple engineering disciplines to achieve program success. Manage all aspects of proposal efforts. Key contributor to establishment of Northrop Grumman as an International expert for SRM Health Management and Service Life Prediction.

RESEARCH & DEVELOPMENT SENIOR SCIENTIST Apr 2014 – Apr 2018

Responsible for providing technical oversight of all health management related research programs. Develop proposal and win strategies, and direction for technical responses. Primary external interface with customers interested in developing or applying health management capabilities. Technical lead for Minuteman Propulsion Replacement Program Service Life Working Group.

Aerojet Rocketdyne
Clearfield, UT

SENIOR BUSINESS DEVELOPMENT MANAGER Nov 2010 – Mar 2014

Responsible for developing new business campaign and capture strategies for Strategic Propulsion Systems. Performed as Capture and Proposal Manager for many successful proposal efforts. Lead development of a five-year strategy and business development plan for Strategic Systems identifying opportunities, pursuits, development strategies, partnering, and budgets. Responsible for capture of Future ICBM Sustainment Acquisition Construct (FISAC) Propulsion Sub-System Support Contract and was responsible for negotiation of teaming agreement with ATK and Boeing. Performed and participated in many market assessments to help set priorities and to determine price to win.

ATK Launch Systems
Brigham City, UT

RESEARCH & DEVELOPMENT DEPARTMENT MANAGER Jan 2004 – Oct 2010

Responsible for providing overall strategy and direction of the Integrated Measurement Systems and Modeling activities within Science and Engineering Research and Development Laboratory. Promoted and supported development of integrated electronic and communication systems with command-and-control capabilities. Developed organizational and administrative skills to effectively manage a high-performance department. Demonstrated the ability to communicate technical information, verbal, written and presentations, to represent all viewpoints of the department. Instrumental in developing technical relationships with Army, Navy, NASA, and Air Force customers and promoting the unique health management expertise within ATK. Successfully managed 100% growth of the department that occurred in less than two years.

PROGRAM MANAGER Nov 97 – Jan 2004

Responsible for the technical, cost, schedule and marketing of advanced technologies relating to health management of solid rocket motor systems. Programs included efforts to enhance and broaden non-destructive evaluation capabilities, sensors and sensing systems, current and future state predictive and interpretive models, chemical modeling, scientific programing, and systems integration. Served as primary customer interface.

Duties included maintaining focus on current programs to ensure successful completion and provide vision for future advancements to customers and management. Provided direction and leadership for integration of multiple engineering disciplines to achieve program success. Managed technical proposal writing of many successful proposals. Key contributor to establishment of ATK as an International expert for SRM Health Management and Service Life Prediction.

CHIEF ENGINEER Apr 92 – Nov 97

Responsible for technical, cost and schedule performance of Minuteman Engineering Services, Aging Surveillance Programs and Minuteman Technology Insertion phase of the Propulsion Reload Program for Loaded Case and Closure, and Nozzle Integrated Product Teams. Served as technical lead for developing the MM Stage I PRP Prime Item Development Specification requirements with TRW and Government. Directed performance of program technical elements such as laboratory and engineering functions. Provided oversight and successfully coordinated all Minuteman related structural, thermal, and ballistic analysis efforts through PDR and CDR. Managed technical proposal writing of several successful proposals. Worked closely with safety, quality control, manufacturing, and program management. Served as primary customer technical interface. Key contributor to successful propellant mix and cast of first Minuteman Stage 1 motor since 1978.

DESIGN ENGINEER Oct 87 - Apr 92

Responsible for propellant and bondline structural integrity analysis of SICBM Stage 1. Managed proposal preparation and capture of Minuteman Stages 1 & 3 Aging Surveillance Proposals that were ultimately awarded to Thiokol. Assisted in the propellant and bondline structural integrity analysis of Minuteman, SICBM, Poseidon C-3, and Trident D-5 motors.

PROFESSIONAL ORGANIZATIONS

Chair of the Integrated Health Management Panel for the Joint Army, Navy, NASA, Air Force Modeling and Simulation Subcommittee from 2000 – 2020 (Only industry member invited to serve on the Modeling and Simulation Subcommittees Technical Steering Committee). Received lifetime achievement award for service.

Served as STEM representative for Northop Grumman at local high schools. Developed presentations addressing STEM requirements for students interested in pursuing aerospace careers. Gave many presentations to local High Schools and Middle Schools. Assisted with organizing STEM field trips to local businesses.

Served as the Northrop Grumman Representative on the Industrial Advisory Board for Utah State University's Mechanical and Aerospace Engineering Department.

EDUCATION

Utah State University
Logan, Utah

MASTER OF SCIENCE IN STRUCTURAL ENGINEERING
Emphasis - Steel and Concrete Structural Design
Thesis Topic - "Design of Reinforced Precast Concrete Sandwich Panels with Weak Core and Truss Type Shear Reinforcement"

BACHELOR OF SCIENCE IN CIVIL AND ENVIRONMENTAL ENGINEERING
Emphasis - Steel and Concrete Structural Design

PUBLICATIONS

1. T. J. Holmes, D. Wickham, J. Lopes, R. S. Hyde, D. A. Isaac, and B. Wilson,, “Algorithm Approaches for Automated NDE Evaluation System 3 (ANDES/3)”, 45th Structures and Mechanical Behavior Subcommittee (SMBS) Meeting, Vancouver, WA, 10-13 December 2018.

2. D. A. Isaac, R. S. Hyde and T. J. Holmes, “A Proposed Architecture for an Improved Automated NDE Data and Evaluation System”, 45th Structures and Mechanical Behavior Subcommittee (SMBS) Meeting, Vancouver, WA, 10-13 December 2018.

3. R. Hyde, D. DeVries, “Current State of Solid Propulsion Integrated System Health Management”, AIAA-2018-1149, AIAA SciTech Forum, Kissimmee FL, 8-12 January, 2018.

4. R. S. Hyde, D. R. DeVries, “Understanding Uncertainty in Prediction Methods”, AVT-268 RSM-046 Specialists’ Meeting on Advances in Munition Health Management Technologies and Implementation, Utrecht, The Netherlands, 9-11 October 2017.

5. D. R. DeVries, R. S. Hyde, I. L Davis, “A Systems Engineering Approach to Evolution of Physics-based Prognostic Health Management of Aging Solid Rocket Motor System Assets”, AVT-268 RSM-046 Specialists’ Meeting on Advances in Munition Health Management Technologies and Implementation, Utrecht, The Netherlands, 9-11 October 2017.

6. R. S. Hyde, I. L Davis, M. P. Iverson, D. E. Richardson, D. R. DeVries, “Model-Based Design Influence On Solid Rocket Motor Integrated Health Management Testing Programs And Reliability”, 43rd Structures and Mechanical Behavior Subcommittee Meeting, Salt Lake City, Utah, 7 - 11 December 2015.

7. R. S. Hyde, I. L. Davis, B. C. Liechty, S. Y. Dressen and J. T. Singleton, "Motor Aging and Surveillance Technology Call 2 Validation Program Overview", 11th Modeling and Simulation Subcommittee Meeting, Phoenix, AZ, 5 - 8 December 2016.

8. H. H. Dewey, N. Christensen, D. R. DeVries, and R. S. Hyde, "The Internet of Things - How a Disruptive Technology in Industry will Revolutionize Aerospace and Defense Health Management", 11th Modeling and Simulation Subcommittee Meeting, Phoenix, AZ, 5 - 8 December 2016.

9. R. S. Hyde, D. R. DeVries, and S. Y. Dressen, “Motor Aging and Surveillance Technology Call 1 Subtopic 1 - Physics-based Models Program Overview”, 11th Modeling and Simulation Subcommittee Meeting, Phoenix, AZ, 5 - 8 December 2016.

10. Scott Hyde; Timothy Sojourner; David Richardson; Brian Allen; Scott McHenry; Ben Goldberg; Derek Devries; Mark Ewing; “Solid Rocket Motor Reliability and Historical Failure Modes Review”, 51st AIAA/SAE/ASEE Joint Propulsion Conference , AIAA Propulsion and Energy Forum and Exposition 2015, Orlando, FL, 27-29 Jul 2015.

11. Scott Hyde, Derek DeVries, Lee Davis, “Evolution to Physics-Based Prognostic Health Management of Aging Assets Through Systems Engineering”, 10th Modeling and Simulation (MSS), Nashville, TN, 1-4 June 2015.

12. Scott Hyde, Derek DeVries, Lee Davis, David Richardson, “Model-Based Design Influence on Solid Rocket Motor Integrated Health Management Testing Programs and Reliability,” 10th Modeling and Simulation (MSS), Nashville, TN, 1-4 June 2015.

13. Scott Hyde; David Richardson; Brian Allen; Benjamin Goldberg; Derek Devries; Mark Ewing;

"Model Based Design Influence on Program Testing Programs, Part I," AIAA Missile Sciences Conference, AIAA Defense and Security Forum 2015, Laurel, MD, 10-12 March 2015.

14. R.S. Hyde, "Technical and Business Case for Solid Rocket Motor IVHM", AIAA Infotech@Aerospace Conference, Workshop: The Business and Technical Case for Rocket Engine Health Management, Seattle, WA, 6 April 2009.

15. R.S. Hyde, "Integrated Vehicle Health Management System Conceptual Design for Solid Rocket Motors", Joint Army, Navy, Nasa, Air Force, Structures & Mechanical Behavior Subcommittee, Space Launch Wireless Sensors Workshop, Las Vegas, NV, 15 April 2009.

16. R.S. Hyde, "Design Optimization: A Finite Element Approach", published in the Proceedings of JANNAF Modeling & Simulation Subcommittee – Workshop on Simulation-Based Design in the Face of Uncertainty, Huntsville, AL., 20 July, 2003.

17. R.S. Hyde, "Integrated Vehicle Health Monitoring", Proceedings of the National Space and Missile Materials Symposium, San Diego, CA, 23-27 June, 2003.

18. R.S. Hyde and E. Udd, "A Solid Rocket Motor Manufacture's View of Sensors and Aging Surveillance", Proceedings of the NASA Propulsion Measurement Sensor Development Workshop, Huntsville, AL., 13-15 May, 2003.

19. R.S. Hyde, "Predictive Aging Surveillance", Proceedings of the Ninth AMRAAM Weapon System Partnership Surveillance Study Group, Capellen, Luxembourg, 8 April, 2003.

20. R.S. Hyde, "A Solid Rocket Motor Manufacture's View of Sensors and Aging Surveillance", Proceedings of the RTO Specialist Meeting on Advances in Rocket Propellant Performance, Life, and Disposal for Improved System Performance and Reduced Cost, Aalborg, Denmark, 23-26 September, 2002.

21. R.S. Hyde, "Health Monitoring Technology for Solid Rocket Motors", Proceedings of the NASA Sensor Working Group Workshop, NASA Glenn Research Center, 16-18 July, 2002.

22. R.S. Hyde, "Integrated Vehicle Health Management Vision for Solid Rocket Motors", Proceedings of the JANNAF 2nd Modeling and Simulation Subcommittee Joint Meeting, Destin, FL, 8-12 April, 2002 (Selected as Best Paper).

23. R.S. Hyde, "A Solid Rocket Motor Manufacture's View of Sensors and Aging Surveillance", Proceedings of the 37th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, Salt Lake City, UT, 8-11 July, 2001.

24. R.S. Hyde, "Sensor Development and Application for Solid Rocket Motor Health Monitoring", National Space and Missile Materials Symposium, Monterey, CA, 24-28 June, 2001.

25. R.S. Hyde, "Maverick Predictive Aging Surveillance Results", Proceedings of the Maverick Missile Technical Coordination Group World Wide Review, Ogden, UT, 22-24 September, 1998.

26. R.S. Hyde, "Maverick Predictive Aging Surveillance", Proceedings of the Maverick Missile Technical Coordination Group World Wide Review, Ogden, UT, 5-7 August, 1997.

27. R.S. Hyde, "Thiokol Aging Surveillance Approach and Results", Proceedings of the Solid Rocket Motor Aging and Surveillance Workshop, 33rd AIAA/ASME/SAE/ASEE Joint Propulsion Conference, Seattle, WA, July 1997.

28. R. Scott Hyde, Derek R. DeVries and I. Lee Davis, “Evolution to Physics-based Prognostic Health Management of Aging assets through Systems Engineering”, 10th Modeling and Simulation Subcommittee Joint Meeting, 1-5 June 2015, Nashville, TN.

29. D. E. Richardson, T. S. Sojourner, B. D. Allen, B. E. Goldberg, R. S. Hyde, K. S. McHenry, D. R., DeVries, and M. E. Ewing, “Historical Solid Rocket Motor Failure Modes and Reliability”, 10th Modeling and Simulation Subcommittee Joint Meeting, 1-5 June 2015, Nashville, TN.

30. D. R. DeVries, R. S. Hyde and B. S. DeHoff, “Benefits of the Integrated Motor Life Management Data Acquisition and Analysis System Engineering Approach in Guiding Technology Development and Lessons Learned”, 7-10 December 2015, Salt Lake City Utah.

31. R. S. Hyde, “Improved Model-Based Design Tools for Solid Rocket Motor Design and Service Life Prediction Lead to Increased Robustness and Reliability”, 43rd Structures and Mechanical Behavior Joint Meeting, 7-10 December 2015, Salt Lake City Utah.