Attachment Two

# Resume for Mark Snell – August 2022

Name: Mark Snell Date of Birth: Available upon request; Place of Birth:

Currently have active DOE Q clearance.

### **EDUCATION**

B.A. in Economics, Syracuse University, 1975
PhD in Operations Research, Cornell University, 1980
Thesis: <u>The Application of Regression Methods to the Initial Transient Problem in Computer</u> <u>Simulations</u> (1980)

### WORK EXPERIENCE

Employed since 2021 as needed by RhinoCorps, Ltd. Co. as a consultant for my expertise on addressing statistical issues associated with stochastic models being incorporated into their combat simulation software Simajin. Simajin is used for site vulnerability analysis by several DOE nuclear facilities, as one example.

Employed at Sandia National Laboratories, November 1, 1979 to August, 2019. I worked in the International nuclear security area since 2006.

- For IAEA technical document creation
  - 2012-2013 Leading role providing technical input to Sandia representative helping to develop NSS 27 - 6, Physical Protection of Nuclear material and Nuclear Facilities (Implementation of INFCIRC/225/Rev 5)
  - 2015-2017 Responsible for creating initial draft for NST055, Handbook for Designing and Implementing a Physical Protection System for Nuclear Material and Nuclear Facilities (a revision of TECDOC 1276). During development of this draft, I coordinated input from Sandia physical protection experts and provided sections on the use of path and scenario analysis for design.
  - 2019: Provided input for the first draft of NST029, Technical Guide on Evaluation of the Physical Protection Systems at Nuclear Facilities
- IAEA Coordinated Research Projects in Nuclear Security
  - 2014-2017 Served as technical lead on the Nuclear Security Assessment Methodology (NUSAM) Coordinated Research Project, which was documented in IAEA-TECDOC-1868

- 2009-2012 Participated in the Coordinated Research Project entitled Development of Methodologies for Risk Assessment and State Management of Nuclear Security Regime
- Instructor for IAEA and NNSA courses:
  - Regional and International Courses in the Physical Protection of Nuclear Materials and Facilities
  - Workshop on the Development, Use, and Maintenance of a Design Basis Threat
  - Regional Training Course on Protective and Preventive Measures against Sabotage of Nuclear Material and Nuclear Facilities
  - NNSA courses on NSS-13 aka INFCIRC/225/Rev. 5
- Other IAEA Activities
  - 2007-2009 Heavily revised the International Training Course on Physical Protection of Nuclear Material and Nuclear Facilities (referred to herein as the ITC) section on physical protection system evaluation to incorporate more effective path analysis tools and Tabletop Exercise (TTX) methods.
  - 2009-2010 Involved in development of first IAEA Security Effectiveness Evaluation (SEE) course (SEE = IAEA term for vulnerability analysis (VA) since Russian Federation uses "VA" to refer to target analysis)
  - 2010-2019 Added subsequent improvements to the ITC sections on evaluation and created computer software, MP VEASI, for those sections
  - 2014-2016 Involved in development of second version of IAEA Security Effectiveness Evaluation Course
  - 2013, 2015, 2017, and 2018 Co-authored and presented papers at IAEA nuclear security/computer security conferences during these years. (During 2016, I coauthored a poster with a French colleague on development and use of physical protection test fields).
  - 2016. Took the IAEA Training Class on International Physical Protection Advisory Service (IPPAS) missions.
  - 2018-2019: Developed new methods, Multipath VISA and the Qualitative Radiological Security Effectiveness Evaluation (QRSEE) approach and implemented these into software.
- Supported bilateral NNSA-Japan programs with the following Japanese organizations
  - 2011-2018. Japan Atomic Energy Agency (JAEA)'s Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) in both developing and presenting courses.
  - 2015-2016, Worked with Japan's Nuclear Regulation Authority (NRA) on bilateral technical projects
- 2013, Primary author developing World Institute of Nuclear Security (WINS) best practice guide on modeling and simulation

Before 2006, I worked primarily in the vulnerability assessment (VA) and software development areas.

- Work Experience and Knowledge in VA processes
  - 1986-1993: Member of ASSESS (Analytic System and Software for Evaluating Safeguards and Security) development team
  - Team Lead from 1990-1993
  - 1994: Evaluated UCCATS (later version of SEES) for use by DOE
  - o 1988-1990: Co-developed and taught ASSESS course
  - 2001-2006: Member of Advanced Timeline Analysis Software (ATLAS) development team (ATLAS is a path analysis tool like ASSESS)
- Experience working independently to develop solutions to complex analytical problems
  - 1978-1979: Devised first generally applicable method for determining exact confidence intervals for the difference of two binomial probabilities.
  - 1988-1989: Developed Outsider analysis algorithm to determine optimal paths without explicitly examining all paths.
  - 1997-1999: Developed methods for determining probability of detection for exterior sensor systems.
  - 2001 Developed algorithms for violent insider (ATLAS project)
  - 2001-2006: Developed and documented statistical and expert elicitation techniques for combining component experiments and field exercise data into input for DOE vulnerability assessment methods and software.
  - 2002-2004: Worked on projects to create more realistic scenarios based on adding realism, to include adversary risk-aversion versus meeting strategic goals, their intent, and logistics of staging attacks.
  - 2008-2009 Developed confidence methodology for site and transportation route assessment project
- Experience developing domestic VA courses
  - 1991: Co-developed and taught VA Fundamentals class at the Central Training Academy
  - 1989-2007 developed portions of other, more advanced, VA-related courses at the DOE Central Training Academy, including courses on using ASSESS and ATLAS
- 1993-1996: Member of Sandia Security Risk Assessment Project applying the use of Probabilistic Risk Assessment techniques to security risk assessment problems (used event-tree codes)
  - Relevance to this effort: part of this effort involved trying to understand scenarios, tactics, techniques, and procedures, and capabilities actual adversary groups might use, rather than assessing vulnerabilities based on policy Design Basis Threats
- Instructor for domestic physical protection courses
  - o 1988-2007 have taught courses at the DOE Central Training Academy
  - 1997-2009: Developed methods and courses for statistical analysis of Joint Conflict and Tactical Simulation (JCATS) runs

- Participated on VA Teams for Complex VA's for DOE Category I facilities from 1982-1997
  - 1993-4 Performed design VA for Complex 21 PU storage facility design team and served as security consultant
- Experience with DOE Orders
  - 1981 Performed a manpower study to determine how many security personnel were needed at the Fuel Materials Examination Facility conceptual design to meet DOE security orders
  - 1984 Responsible for creating the Argonne National Laboratory East security plan to meet DOE security order requirements
  - 1989 Worked on team incorporating DOE Standards and Criterion into Security Audit Order

# MISCELLANEOUS

- Developed Risk Assessment Course for Instruction at Arizona State University 2000
- TDY at Germantown 1986: studied pros/cons of Historical and Propagation of Error methods for ID variance; looked at audit methods
- ASSESS Train-the-Trainer class for Russian MOD (1995 1998)

Note: A list of reports and conference papers/presentations are available on request.

## UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

THE UNITED STATES OF AMERICA§vs.§ELMER STEWART RHODES, III§

CAUSE NO.: 1:22-CR-15

### NOTICE OF DEFENSE EXPERT

**COME NOW** BRADFORD L. GEYER, Counsel for Kenneth Harrelson, and inform the United States Attorney's Office, more specifically Jeffrey Nestler and Kathryn Rakoczy, and the Court that the defense is intending to designate Mark K. Snell as the defense team's expert on facilities vulnerability assessments, testing of physical protection/security systems and procedures, who has spent the bulk of his career assessing and modeling threat scenarios for high value facility targets, *See attached CV*. While developing final opinions, we plan to have the expert initially available as an inside technical expert to assist us in reviewing Government's discovery productions and requesting supplemental productions and to conduct inspections of key security features like the Columbus door and monitoring systems. It is possible this expert will become a testifying expert after he receives and reviews necessary discovery and finalizes an opinion.

Having only reviewed the public record until now, the expert plans to assist in preparing supplemental discovery requests so that he can review the overall process and sequence of police and security management response decision making and their ensuing activities on routes into the Capitol security plan as well as to discern

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from the available evidence any plan of attack, field and order of battle and what, if any, involvement the Oath Keeper's had in it. He will be examining all Oath Keeper conduct, communications and visual evidence to form as opinion as to their involvement.

From public information the expert has already reviewed, there are multiple, independent, and persuasive lines of evidence that strongly suggest January 6 involved a sophisticated attack by suspicious actors that included aspects of spontaneity that may have been reactive or anticipated and built into a plan as contingencies. Trained individuals with varying interpretations of affiliation seem to have arrived at the Capitol complex starting early in the day and continuing thereafter. Others seem to have reported for duty at the ellipse where one observable deliverable seems to have been "drumming" or "wrangling" where a human flow created by President Trump, protest organizers and others-- was reinforced and directed to the Capitol grounds.

Given the strong evidence that a sophisticated attack plan was carried out by suspicious actors on January 6, the inclusion in that plan of a coordinated diversion, namely two bombs being left elsewhere, is completely consistent with the expert's theories especially since both were found almost simultaneously with the first violence at the Police barriers near the Capitol. It is important to determine to what extent it appears that the bombs were left as part of independent actions versus a

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coordinated plan and whether the evidence suggests that the Oath Keepers were involved in this activity or not. The expert will review what is known about when and how the bombs were constructed, information about when and how they were apparently deposited; what transpired between when they were deposited and found; and how they were discovered and rendered safe.

As part of this effort the expert will review the security procedures and security systems and personnel (including the Capitol Police) that were in place in the morning of September 6<sup>th</sup> or arrived thereafter to track how those security systems and personnel were employed that day with the sole purpose of helping him to uncover, detect, and validate from their actions the elements of his inferred plan the actors were carrying out (there is no intent to find fault with police tactics or decisions). The expert will incorporate into a timeline the policing decisions and security management decisions as they developed throughout the day including the change in control from USCP to MPD of incident response management at the Lower West Terrace. In support of these efforts, the expert will review, as necessary, the relevant surveillance video under protective order, police communications, and leadership communications and review timing of different events in a constellation of locations to assess official response to discover and document what may be indicia of planning and coordination among attackers at leading edges and salted within the crowds influencing behaviors. Where the data support it, the expert will potentially develop opinions regarding how the interaction of the plan and these security/police-related activities may have

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affected response in the East as well as public perceptions among rally attendees about what conduct and access was permitted in the full context as it unfolded, how these expectations might have been developed, formed, shaped and misdirected by trained actors, how police response may have impacted crowd control and projected ambivalence or approval, how developing events and actions of suspicious actors may have exacerbated a devolving situation sowing confusion, forcing unusual police behavior that diminished consciousness of wrongdoing among otherwise average individuals.

The expert has already devoted approximately 1000 hours reviewing the public record, studying the array of groups that likely had influential presence on January 6 and engaged in extensive scenario modeling that has informed his current view. The expert finds it most remarkable about January 6 is that a large group of rioters, only a few of which carried firearms, went up against hundreds of armed Capitol and Metropolitan Police and successfully penetrated their lines and were able to reach areas very near both Chambers. Applying doctrinal theory normally used by Special Operations forces to this incident, those attacking the Capitol faced a similar predicament to Special Operations forces that typically must defeat forces that are larger, have better armaments, and/or have stout, prepared defenses.

Preliminarily, Mr. Snell strongly believes that those who planned and executed the January 6 assault almost certainly did not have recent or incident specific Special Operations training, but their assault appears to have shared similar theoretical elements. First, they effectively used a numerous crowd in an innovative fashion as NOTICE OF EXPERTS-RHODES 4

a-largely unknowing force-multiplier to directly pin down police (e.g., at the Lower West Terrace) and to break through police lines, and to use that same crowd – with concentration, flags, body and facial masking, costume changes, other visual blocks, excessive noise and disorienting movements – to effectively hide their activities – making it harder for observers to perceive continuity of actors over time, coordination or conformance to design or plan, and to frustrate efforts to identify those who led and executed the assault. Secondly, they used novel tactics. To Mr. Snell's knowledge no right-wing domestic group had previously attacked police through the leveraging of large crowds without material use of firearms. Third, the attackers appear to have developed tactics for carrying out the assault that several groups of rioters used in a very consistent way with signature characteristics; this suggests that there was a fairly significant level of training to ensure each team of rioters would be successful the first time these tactics were used. A core component of the plan was to deploy the unwitting. Finally, and perhaps most importantly, Mr. Snell currently sees a fairly simple plan: using one force to pin down the police and draw resources to the Lower West Terrace, another force having the objective of letting rioters into the Capitol so that they could reach some area near the Senate to engage in protest activities there, while the third group (which could have included elements of the first two groups) had a similar assignment near the House. In order for these objectives to be accomplished, resources were gradually drawn down that early in the afternoon had been located in the West near the Northwest Steps and were then redirected to the East, teams broke through in a timed manner at two breach points and barriers were removed as necessary. Specifically regarding the NOTICE OF EXPERTS-RHODES 5

East side of the Capitol, an array of techniques were used by actors leading up to the coordinated breakthrough that occurred at 1:58 p.m., which appear to have significant effects and influences on otherwise law abiding rally attendees who walked up to the East steps and other nearby areas after those provocateurs pushed through temporary barriers. Meanwhile, the Senate protestors having arrived in place by approximately 2:16 p.m. and the House protestors having arrived in place just outside the House Chamber inner doors by 2:36 p.m.- the teams of violent actors had further assignments to open entrances and to keep them open to let the largest numbers of protestors inside while breaking through police lines inside attempting to block hallways or doorways. According to this timeline, if accurate, the Oath Keepers entered the Capitol at 2:38 p.m., incidentally just after the teams inside had completed their first two objectives and were engaged primarily in carrying out, or helping to carry out, the latter objective of opening the Columbus doors for provocateurs and actors who were then let in to, perhaps, pursue second and third tier assignments which the expert has not spent any effort to identify. The collateral victims of this effort were primarily more or less average Trump supporter protestors, who once they entered inside, could be unwittingly grouped and who through pushing by trained provocateurs could be observed pushing internal police lines out of the way. In addition, these efforts could conceivably and equally have sucked in those who had focused their attention at the time on helping Capitol police possibly because the former recognized there were officers who were overwhelmed and some of whom were frightened; from the expert's point of view, it is unclear whether this involvement for the defendants was intentional or unintentional on the

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part of the actors and provocateurs. The expert has found little evidence supporting the argument that the defendants willingly participated in these actions or approved of them, although it must be admitted that a significant limitation of the expert's methods is that he cannot discern or infer whether someone is refusing to do something versus fighting to avoid committing that act, versus engaging in it passively, actively, enthusiastically, or by sheer coincidence of being in the wrong place at the wrong time.

It is important to distinguish several categories of Capitol areas and timeframes when addressing the violence on January 6. The apex of violence occurred at the Tunnel Archway after about 2:40 p.m. but Mr. Snell has found no evidence linking the suspicious actors observed in other areas in a significant way with that violence nor the Oath Keepers who are defendants in this case at all. There was also significant, though lesser violence committed on the Lower West Terrace or near the First-Floor Senate Door Entrance before 2:40 or in areas near the Crypt but he has seen no evidence in the public record suggesting that the defendants were in any way involved in those events either. The defendants' activities appear to have been restricted to the East side, the Columbus door area, and in the Rotunda or near it. As of January 2022, when Mr. Snell last analyzed the numbers of people charged with Physical Violence or have charges involving "deadly or dangerous weapons" near the House or the Rotunda before 3 p.m., there appeared to be only about 10-15 who fell in this category depending upon how one interprets different charges. It

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would be relevant to find out how many officers were injured on the Second Floor of the Capitol during this timeframe.

Further, tactics by suspicious actors appear to be very similar whether one is looking at rioters attempting to break through police lines at the midway steps leading to the First Floor Senate Entrance, at the East barricades about 2 p.m., and at the police line just outside the House Entrance doorway: menace and agitate the officers manning whatever police line is involved while simultaneously try to negotiate with those officers to let rioters past that police line; and, failing that negotiation strategy, use teams of suspicious actors to literally shove the unwitting crowd through that police line. In some cases, negotiation turned out to be impractical so here those actors move directly to shoving crowds towards police as we see with the defendants as they are pushed against a police line in a hallway leading to the Senate.

The expert has seen scattered accounts and records suggesting that the officers near the House erroneously believed there was an active shooter incident underway based on a loud noise that occurred between 2:36 and 2:42 p.m. near the House Chamber doors. If such an error occurred, this may have had a material influence on police behavior that occurred subsequently and, if notice of such an incident somehow reached one or more of the defendants, this may have influenced those defendants' decisions to enter the Capitol based on their wanting to help. Dated: August 30, 2022

# RESPECTFULLY SUBMITTED

<u>/s/ Brad Geyer</u> Bradford L. Geyer, PHV PA 62998 NJ 022751991 Suite 141 Route 130 S. 303 Cinnaminson, NJ 08077 <u>Brad@FormerFedsGroup.Com</u> (856) 607-5708

# **CERTIFICATE OF SERVICE**

I hereby certify that on August 30, 2022, a true and accurate copy of the forgoing was electronically filed and served through the ECF system of the U.S. District Court for the District of Columbia.

<u>/s/ Brad Geyer</u> Bradford L. Geyer, PHV PA 62998 NJ 022751991 Suite 141 Route 130 S., 303 Cinnaminson, NJ 08077 <u>Brad@FormerFedsGroup.Com</u> (856) 607-5708