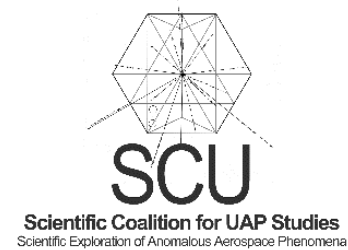


“Where Science and UAP Meet”

Conference Moderator



Mr. Rich Hoffman

Bio: Rich Hoffman is a 25+ year Army Information Technology (IT) defense contractor with Chugach Government Solutions. He is a Senior Systems Engineer Analyst working in the US Army Materiel Command Headquarters at Redstone Arsenal, Huntsville, Alabama helping to shape the future directions of systems, networks and application hosting arrangements used within the Army.

For the past 58 years, since his eighth-grade science class and timed with the Lonnie Zamora sighting on 24 April 1964, Rich has been pursuing his primary interest in investigating, researching and lecturing on the subject of UFOs.

In June 2017, Rich left his position as MUFON Director, Strategic Projects, and Alabama State Director along with other positions within MUFON. He is still a Benefactor and as such is a lifetime subscribing only member.

Currently, he is an Executive Board Officer for the Scientific Coalition for UAP Studies (SCU), a coalition of like-minded serious and dedicated scientists and professionals who want to solve the phenomena using scientific methodologies and leverage current technologies to do so.

Keynote



Mr. Ryan Graves

Title: “UAP & Government: The Innovation Imperative”

Abstract: How could the USG increase the investigatory power behind UAP? Technical innovation in the USG is constrained by the inability of government R&D to keep pace with peer nations or industry. As the DOD establishes a technical roadmap to investigate UAP, how can the USG’s expanding technical innovation ecosystem be leveraged to enable scalable problem-

solution pairing in potentially unclassified environments? In this presentation, we will explore how the USG could engage the technical expertise of the wider innovation ecosystem to investigate UAP.

Bio: Ryan Graves is a former F/A-18F Super Hornet pilot with over 2000 hours of flight time. Ryan conducted two combat deployments aboard the USS Enterprise and USS Theodore Roosevelt before honorably separating. In 2018, Ryan joined BAE Systems’ FAST Labs as a Technology Development Manager, focused on AI, hypersonics, and multi-agent intelligences, winning programs such as DARPA’s Air Combat Evolution TA-1 and AFRL’s Skyborg Vanguard Program. Currently, Ryan is the Director of Operations at Quantum Generative Materials (GenMat), a material science company using Quantum Computing-enabled AI to discover novel materials.



Conference Presenters



Dr. Hakan Kayal*

Title: “Research on UAP, SETI and Space Technologies at Julius-Maximilians-University of Würzburg, Germany”

Abstract: Since 2008, research at the professorship for space technology at the Julius Maximilians University of Würzburg has primarily focused on new technologies for space technology. However, the search for extraterrestrial intelligences and the exploration of UAPs have also been among the research foci since then. In the lecture the general situation regarding SETI and UAP research in Germany will

be discussed as well as their own development work and student contributions. This includes SkyCAM-5, the latest version of a camera system for UAP detection, which is in test operation since December 2020 and will be further extended. The presentation further includes selected projects in the field of space technology, such as satellite components and satellite missions, which are performed at the professorship. The presentation concludes with an outlook on future projects.

Bio: **Hakan Kayal** is a professor for space technologies since 2008 at the Julius-Maximilians-University Würzburg (JMUW), Germany. His current main research interests are in the fields of design, construction and operation of space systems, especially highly autonomous nanosatellites for scientific applications, search for extraterrestrial intelligences (SETI) and research on unidentified aerial phenomena (UAP). He is responsible for several teaching courses in the field of space mission design and operations.

After his study of aeronautics and astronautics at the Technical University of Berlin (TUB), prof. Kayal worked for about one year at the satellite control center of the Turkish geostationary communications satellite TÜRKSAT 1B in Ankara/Turkey as a satellite controller. He moved then back to Berlin and worked for seven years at the German Aerospace Center (DLR) in Berlin-Adlershof where he was responsible for several parts of DLR's BIRD satellite mission, finally as the deputy project leader. He changed to TUB where he was the leader of BEESAT, a pico satellite, which was launched in 2009 and was successfully operated for several years. At JMUW he is responsible for several projects, amongst them the Nanosatellite SONATE-2, which is a technology demonstration mission for artificial intelligence aboard of nanosatellites. SONATE-2 will be able to train itself in space and be able to detect anomalies at the surface of Earth from orbit, when launched in 2024. Prof. Dr. Kayal is also responsible

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for the development of UAP detection systems and related works since 2008. The latest version (SkyCAM-5) started its operation in December 2021.

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Dr. Alexander Wendt*

Title: "Dangerous Knowledge: UFO Science and the Last Humans"

Abstract: Among other remarkable new thinking, the 2021 Pentagon report calls for the systematic, scientific study of UAP, by civilians as well as the military. While scientists are hardly rushing to the call, over time a UFO science is likely to grow around today's small cadre and expand, perhaps significantly, our knowledge of UAP. However, in these heady early days, it is easy to forget that UFO science could be dangerous, because one of its potential findings is that ETs are here, on "our" planet. While that would be the most important and perhaps sublime event in human history, it could also provoke a profound legitimacy crisis for our

anthropocentric worldview and all the institutions that presuppose it. Chief among those is the modern state, the cohesion of which depends on people believing there is no alternative to human rule. But what if people thought that benign, vastly more powerful beings – "gods" – might literally materialize (let alone actually did so!), not safely far away as in SETI scenarios, but up close and personal? In the face of such immense power, would human beings stick together, and our states be able to maintain control, or would panic set in and state authority begin to collapse? No one knows, but with the internet spreading misinformation, fear, wild hopes, conspiracies, apocalyptic thinking, and demagoguery, it is not hard to imagine a civilization based completely on the assumption that "We Are Alone" disintegrating into survivalism, crime, vigilantism, hedonism, and even mass suicide. Either way, humans would never be the same. That does not mean UFO science should not press forward, but it raises deeply political questions about how to create and disseminate such dangerous knowledge in a responsible way. Ironically given the history of the UFO taboo, that may include a continuing role for UFO secrecy, and perhaps also more international coordination and control.

Bio: Alexander Wendt is professor of political science at The Ohio State University, where he has taught since 2004, after previous appointments at Yale, Dartmouth, and the University of Chicago. In addition to his day job, he has been interested in the UFO problem since April 1999, first as a hobby and later as a serious research interest. He has published "Sovereignty and the UFO" in the journal *Political Theory* in 2008; did a TEDx talk in early 2020 entitled "Wanted: A Science of UFOs"; and is currently writing a book on themes in his talk."

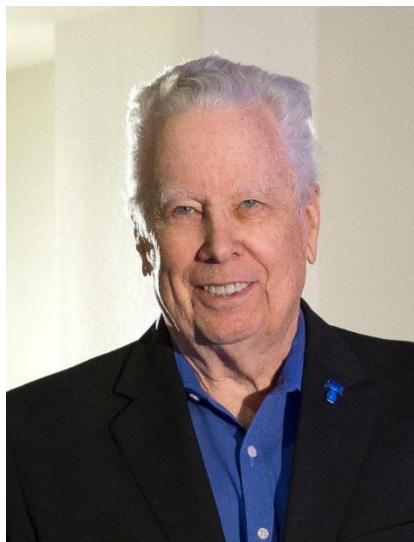
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Panel – The National Security Implications of Scientifically Studying UAP

- **Moderator – Dr. Joseph DiNoto**

Abstract: The panel evaluates the National Security implications of scientifically studying UAP. By scientifically exploring and technically investigating this topic, the panel will discuss what advancements in science & technology could evolve and how do those advancements support American National Security. The missions and functions within the US Intelligence Community, Department of Defense, or Department of Homeland Security that could be impacted by the scientific study of UAP will be a focal point of the discussion. The panel will discuss the scientific aspects of this issue from both the operational practitioner and technologist points of view. Additional elements of the discussion will include national security technology transfer in terms of providing a contextual understanding of where new discoveries from this area could migrate from the Department of Defense or Intelligence Community into scientific applications that have civil use for the betterment of society.

Panelists

- **Dr. Garry Nolan**
 - **Mr. Joshua Pierson**
 - **Mr. Rich Hoffman**
 - **Dr. Matthew Szydagis**
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Dr. John Alexander

Title: “UFOs/UAPs: Enigmas and Complexities”

Abstract: Decades before there was AAWSAP or AATIP, there was ATP or the Advanced Theoretical Physics project. Though ad hoc (not officially sanctioned), it was conducted at the TS/SCI level with participants coming from all the DoD services, the IC, and civilian aerospace industries. Almost all of the conclusions associated with the Congressional report in 2021 were known in the 1980s – and most had been observed well before that. So, what was different? One area is the response of senior leadership and external

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pressure. Given that many flag-level officers are likely to have their own experience, why then were there not more studies and serious research undertaken? What was the resistance, and why does it continue? A key problem is individual interest versus institutional responsibilities.

There are some very fundamental issues that need to be addressed beginning with the definition of what constitute UFOs/UAPs. The extraterrestrial hypothesis or ETH is challenged as there are reports of interactions between humans and sentient nonhumans for millennia. An argument will be made that it is essential to examine the data far more broadly than is commonly accepted. Conversely, there are risks to management and funding if the full breadth of the observations are contemplated and articulated.

These phenomena are at least as complex as cancer, yet research funded at miniscule levels. What if any, is the appropriate governmental role in researching these topics? As stewards of public funds, how should senior managers approach these complex issues? Any hope of resolution would require an agenda similar to the Human Genome Project with billions in funding and international cooperation with data sharing between the top universities and laboratories fully cooperating. Any chance that will happen?

Bio: Dr. Alexander has spent half a century engaged in national and international security. On active duty in the U.S. Army, he held key assignments in Special Forces, (including as a combat commander in Vietnam), Intelligence, and R&D. A colonel, his last assignment was Director of Advanced System Concepts at U.S. Army Laboratory Command. As progenitor of non-lethal warfare, his second career was at Los Alamos National Laboratory. Retiring from the University of California, he was the first to join The National Institute for Discovery Science in Las Vegas.

Later, in 2003 he was assigned a mentor to the most senior officials in the Ministry of Defense in Kabul, Afghanistan. Returning to the U.S., for a decade, he was a senior fellow with the Joint Special Operations University. He has a MA from Pepperdine University, and a Ph.D. from Walden University. He later attended advanced courses in management at the Anderson School at UCLA, the Sloan School at MIT, and the Program for Senior Executives in National and International Security at the Kennedy School of Government, Harvard University.

Over the years, he served on studies for the National Research Council, Army Science Board, and NATO. He also served as an advisor to the National Intelligence Council and U.S. Special Operations Command. Recipient of the DOE Nuclear Weapon's Program Award of Excellence, he was an Aviation Week & Space Technology Laureate, and inducted into their Hall of Fame at the Smithsonian Air and Space Museum. He is listed in Who's Who in Science and Engineering and American Men and Women of Science. Militarily, in addition to awards for valor and service, in 2001 he was inducted in the U.S. Army Officer Candidate School Hall of Fame and is a recipient of the Knowlton Award by the Military Intelligence Corps. In 1987 President Reagan awarded

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him The President's Volunteer Action Award for efforts in assisting in the creation of Children's Hospice International.

He is author of many articles, monographs and nonfiction books, including, *The Warrior's Edge*, *Future War* (with foreword by Tom Clancy), *Winning the War*, *UFOS: Myths, Conspiracies, and Realities*. and *Reality Denied: Firsthand Experiences with Things that Can't Happen – But Did*.

Panel – SCU Projects

Abstract: This panel explores what some of the SCU Projects are that we are currently working. Each panelist is a lead on the project and will introduce the project and take questions.

- **Moderator- Mr. Rich Hoffman**

Panelists

- **Mr. Robert Powell** – UAP Characterization Study
- **Mr. Peter Reali** – Arizona/Mexico DHS Video Analysis
- **Mr. Larry Hancock*** – UAP/Nukes Intentions Study



Dr. Matthew Szydagis

Title: The First Scientific Results from UAPx

Abstract: Profs. Knuth and Szydagis and Mr. Christopher Altman will together be presenting a summary of the most interesting findings from the first expedition of UAPx, to the U.S. West coast, stemming from visible-light camera videos, but also long and shortwave infrared imagery and radiation detection running in parallel simultaneously with the other sensing modalities, which included a Zener-diode-based quantum random noise generator. We will be presenting what we believe is, to the best of our

knowledge, one of the few sets of non-classified and non-governmental, multi-mode sensor data on UAPs, and in some cases from different angles of what could potentially be the same object. Multiple inexplicable objects and/or phenomena were captured demanding explanation, and further scientific study by the community. Over 2TB and nearly 1,000hr of video were combed through manually and/or by custom UAPx-written neural networks, and were found to contain both everyday phenomena,

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such as airplanes, avians, balloons, drones, helicopters, insects, paragliders, sea-faring vessels, clouds, and the Moon, which could be used as controls for temperature, position, size, and speed determination, but also UAPs demanding our attention, for which we have robust estimates of shapes and sizes, applying super-resolution imaging in some cases. In addition to UAP, we report on the first simultaneous measurement of an off-axis coronal mass ejection with a radiation detector, the Cosmic Watch developed by MIT, and a traditional CCD camera, from the UFODAP system of Ron Olch. (This was a scientific bonus, a coincidental measurement of solar activity further assisting us in establishing baseline measurements of "normal.")

Bio: Dr. Matthew Szydagis received his B.A., M.S., and Ph.D. degrees from the University of Chicago, then worked as a postdoctoral scholar at the University of California Davis. He is now an Associate Professor at the University at Albany SUNY studying experimental particle astrophysics, in particular direct detection of dark matter, as well as general detector development for rare event searches. He was inspired by Star Trek: The Next Generation as a child to become a scientist, and has always been fascinated by the UAP phenomenon, treating it seriously his entire life.



Dr. Kevin Knuth

Bio: Prof. Kevin Knuth is an Associate Professor in the Department of Physics at the University at Albany (SUNY), and is the Editor-in-Chief of the journal Entropy (MDPI). He is a former NASA research scientist having worked for four years at NASA Ames Research Center in the Intelligent Systems Division designing artificial intelligence algorithms for astrophysical data analysis. He has over 20 years of experience in applying Bayesian and maximum entropy methods to the design of machine learning algorithms for data analysis applied to the physical sciences. His current research interests include the foundations of physics, quantum information, inference and inquiry, autonomous robotics, and the search for and characterization of extrasolar planets. He has published over 90 peer-reviewed publications and has been invited to give over 80 presentations in 14 countries. Kevin is a Contributing Member of SCU and a Vice President – Science & Technology for UAP Expeditions (UAPx).

<http://knuthlab.rit.albany.edu/>



Mr. Christopher Altman*

Bio: Christopher Altman is an American physicist, quantum technologist and NASA-trained commercial astronaut who began his scientific career with a Guinness world record-holding artificial intelligence project and a NASA/USAF-supported time travel division at multidisciplinary, “Deep Future” research institute Starlab, featured in a Discovery Channel Special and in the Guinness Book of World Records.

His next-generation science and technology initiatives include research at world-leading institutes including NASA Ames Research Center, Kavli Institute of Nanoscience, a fellowship with Anton Zeilinger's pioneering quantum foundations group at International Academy Traunkirchen, as senior research scientist at an astronaut training facility on the slopes of Mauna Kea in Hawai'i, as Chairman for the UNISCA First Committee on Disarmament and International Security—selected as annual recipient of the RSA Award for Outstanding Achievement in Government Policy—and as part of the US Government's fast-track QuIST program in the global race for quantum supremacy.

As Director of the Board and Chief Science Officer for the world's first commercial astronaut corps, then as Director with the successor to the NASA Breakthrough Propulsion Physics Program, his research spans the fields of quantum technology and next-generation spaceflight. His inaugural keynote address as a candidate with the commercial astronaut corps was broadcast live to 108 sister cities around the world. NASA allocated funding to the corps for its first manned spaceflights the following spring.

Altman currently serves as Vice President of Science and Technology (Space) and Director of Special Projects with UAPx (UAP Expeditions) and is a contributing research affiliate with The Galileo Project for the Systematic Scientific Search for Evidence of Extraterrestrial Technological Artifacts at Harvard University.



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Dr. Ted Peters*

Title: “Will Astrobiologists and Ufologists Attend the Same BBQs?”

Abstract: Astrobiologists and Ufologists have not typically been seen together at the same BBQs. Why? Each argues that the other as unscientific. Astrobiologists accuse ufologists of tolerating woo-woo and engaging in pseudoscience. Ufologists accuse astrobiologists of failing to attend to the evidence that Earth is being visited by extraterrestrials. Are things changing now, with more scientists planning to gather and interpret data regarding

Unidentified Aerial Phenomena?

Bio: Ted Peters (Ph.D., University of Chicago) directs traffic at the intersection of science, religion, and ethics. Peters is an emeritus professor at the Graduate Theological Union, where he co-edits the journal, *Theology and Science*, on behalf of the Center for Theology and the Natural Sciences, in Berkeley, California, USA. Along with Martinez Hewlett, Joshua Moritz, and Robert John Russell, he co-edited, *Astrotheology: Science and Theology Meet Extraterrestrial Intelligence* (2018). Along with Octavio Chon Torres, Joseph Seckbach, and Russell Gordon, he co-edited, *Astrobiology: Science, Ethics, and Public Policy* (Scrivener 2021). He is also author of *UFOs: God's Chariots? Spirituality, Ancient Aliens, and Religious Yearnings in the Age of Extraterrestrials* (Career Press New Page Books, 2014). See his website: TedsTimelyTake.com and his Patheos blog on Public Theology, <https://www.patheos.com/blogs/publictheology/2021/12/are-nasa-and-priests-preparing-for-eti-contact/> .

Panel – Academia & UAP

Abstract: The panel explores the Academic stigma and challenges in educating students and conducting studies in educational institutions with regards to the UAP subject. The discussion explores ways that this situation or environment can be improved. We also look into how we create partnerships with educational institutions in pursuit of analyzing solid data.

- **Moderator – Mr. Rich Hoffman**

Panelists

- **Dr. Kevin Knuth**
- **Dr. Matthew Szydagis**

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- Dr Ted Peters*
- Dr. Alexander Wendt*

Panelist Bios

Many Panelists Bios have already been provided, but there are a number who we provide here that were not already covered. These are in order of appearance.

National Security & UAP Panel

Dr. Joseph “Joe” DiNoto



Bio: Dr. Joseph DiNoto brings over 30 years of national security experience in conducting criminal investigations, supporting intelligence activities, managing security operations, and leading counterterrorism efforts. His operational experience includes senior level Intelligence Community assignments in support of special operations, space, and missile defense forces, as well as law enforcement leadership assignments in support of homeland security related activities. Dr. DiNoto possesses a Doctorate in Strategic Security Studies with a specialization in National Security Strategy from the Henley-Putnam School of Strategic Security Studies at National American University. He possesses a Master’s Degree in Global

Strategies with a concentration in International Security, a Bachelor’s Degree in Political Science with concentrations in National Security Affairs & Intelligence Studies, and an Associate’s Degree in Criminal Justice with a concentration in Protective Intelligence. In 2015, he was inducted into the Order of the Sword & Shield, the national academic honor society for intelligence and security professionals.



Dr. Joshua Pierson

Bio: Joshua Pierson, DSS (ABD) is a strategic security subject matter expert with 21 years in the field. Joshua has played a major role in educating his superiors and counterparts in the importance of technology protection, insider threats, and illuminating adversarial capability and intent to target US Interests at home and abroad. Through his commitment to this role, he has helped increase the understanding of senior National Security Professionals regarding methodologies to counter adversarial interest in areas and venues of extreme sensitivity.

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He has a Bachelor of Arts in Intelligence Studies from American Military University, a Master of Science in Strategic Security and Protection Management from Henley-Putnam University and is pursuing a Doctorate in Strategic Security from National American University with a projected graduation year of 2022. His dissertation is titled “Design Methodology and “Unidentified Aerial Phenomena, a Measurement and Signature Detection Strategy.”



Dr. Garry Nolan

Bio: Dr. Garry Nolan is the Rachford and Carlota A. Harris Professor in the Department of Pathology at Stanford University School of Medicine. He has published over 300 research papers, is the holder of 40 US patents, and has been honored as one of the top 25 inventors at Stanford University. Dr. Nolan is the first recipient of the Teal Innovator Award (2012) from the Department of Defense (a \$3.3 million grant for advanced studies in ovarian cancer), the first recipient of an FDA BAAA to an academic institution (\$3 million for “Bio-agent protection” grant from the FDA for a “Cross-Species Immune System Reference”), received the

award for “Outstanding Research Achievement in 2011” from the Nature Publishing Group for his development of CyTOF applications in the immune system, Elected as a Fellows of the American Institute for Medical and Biological Engineering, and is the recipient of the Ernest Cotlove Award from the Academy of Clinical Laboratory Physicians & Scientists.

Dr. Nolan is an outspoken proponent of translating public & private investment in basic research to serve the public welfare. Dr. Nolan was the founder of Rigel Inc. (NASDAQ: RIGL), and Nodality, Inc., a diagnostics development company and serves on the Boards of Directors of several companies, as well as consults for other biotechnology companies. Dr. Nolan’s areas of research include hematopoiesis, cancer and leukemia, autoimmunity and inflammation, and computational approaches for network and systems immunology. Dr. Nolan’s efforts are to enable a deeper understanding not only of normal immune function, trauma, and other inflammatory events but also detailed substructures of leukemias and solid cancers—which will enable wholly new understandings that will enable better management of disease and clinical outcomes.

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SCU Projects Panel



Mr. Robert Powell

Bio: Robert has a BS in Chemistry and is a former collegiate debater. He has 28 years' experience in engineering management in the semiconductor industry. While working at Advanced Micro Devices he has taken numerous internal courses related to device physics, design of experiments, and statistical analysis. He helped Advanced Micro Devices develop its first flash memory technology that is used in today's flash cards for cameras, PCs, video cameras, and other products. His experience includes managing a state-of-the-art chemistry laboratory and managing a Research and

Development group that worked on nanotechnology using atomic force microscopes, near-field optical microscopy, and other techniques. Robert is also a co-holder of four patents related to nanotechnology.

Robert Powell is a founding Board member of the Scientific Coalition for UAP Studies (SCU). He was the Director of Research at MUFON from 2007-2017 and created MUFON's Science Review Board in 2012. Robert is one of two authors of the detailed radar/witness report on the "Stephenville Lights" as well as the SCU report "UAP: 2013 Aguadilla, Puerto Rico". He is also the primary author on the recently published paper, "A Forensic Analysis of Navy Carrier Strike Group Eleven's Encounter with an Anomalous Aerial Vehicle" and a secondary author of a paper published in the journal *Entropy* entitled, "Estimating Flight Characteristics of Anomalous Unidentified Aerial Vehicles." Robert is a member of the Society for Scientific Exploration, the UFODATA project, and the National Space Society. Robert is a co-author of a book published in July 2012: *UFOs and Government: A Historical Inquiry* and is an author of a book designed for children published in Nov. 2020 entitled, *The Truth About UFOs: A Scientific Perspective*. Robert currently resides in Austin, Texas.



Mr. Peter Reali

Bio:

Career: He had a long career in Silicon Valley and an electrical design engineer and manager of engineering projects. His specialty was in telecommunications and network and information technologies. He has designed systems including mobile telephone control systems, fiber optic ring networks, T1, T3 and Sonnet communication systems. He has done design in digital phase lock loop and network timing synchronization. He has done digital design

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using FPGA technologies to implement networking equipment. He has led project teams as an engineering manager.

Current Activities: Member of the Board of Directors and Director of Project Development for the [SCU] Scientific Coalition for UAP Studies. Currently he is retired and enjoys photography as a member of the Boise Camera Club, plays blues harmonica with the Boise Blues Society and does research with the Scientific Coalition for Ufology. [SCU] Education: BSEE and MSEE from the University of California Berkeley in Communication Theory and Digital Design Engineering.



Mr. Larry Hancock*

Bio: Larry Hancock is a graduate of the University of New Mexico, earning his BA with a triple major in history, cultural anthropology, and education. After serving in the United States Air Force, he pursued a corporate career in technical education and technology marketing. Following retirement, he turned to historical research and published several collections of CIA, FBI and military documents prior to writing and publishing a dozen books in Cold War era military, and national security topics including Unidentified / The National Intelligence Problem of UFOs. His role in the Intentions

Project deals with the identification and selection of study and control sites as well as the development of the historical context all atomic facilities and military bases.

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