WG CDR (RETD) HARRY PALMER, GENERAL MANAGER, RAF SHAWBURY FOR UK MFTS
“Harry” Palmer enlisted in the RAF as an Engineer Technician in 1983. He subsequently Commissioned in 1989 and gained his RAF Pilots Wings. Harry has flown 5000+ hours Rotary Wing with operational time on Battlefield Helicopters and Search and Rescue duties serving in Europe, Belize, the Balkans, Africa, the Falklands and extensively in the Middle East.

Harry became a Flying Instructor at the Defence Helicopter Flying School (DHFS), RAF Shawbury in 2003 and won his CFS ‘A2’ as Commanding Officer Sixty Squadron. He returned to the DHFS as the Chief Flying Instructor 2013-16. Harry left the RAF in 2016 to join ASCENT Flight Training, initially as the Lead Rotary Wing Transition Pilot introducing the H135 (Juno) and H145 (Jupiter) into military service. He went on to become the General Manager of the ASCENT Rotary Wing footprint at RAF Shawbury & RAF Valley.

1. CAPTAIN NIGEL PIERCEY, TRAINING MANAGER, UK SEARCH AND RESCUE – BRISTOW HELICOPTERS.

Captain Nigel Piercey, B.Sc. (Hons) Cert Ed. Training Manager, UK Search and Rescue – Bristow Helicopters. Since graduating from Brunel University, Nigel has dedicated his professional life to Teaching and Training. His Rotary Wing experience spans 8 aircraft types; both military and civilian. Nigel serves as the UK Search and Rescue (SAR) Training Manager for Bristow Helicopters, based in Aberdeen. He has recorded in excess of one year (8,760 hours) airborne in helicopters. Nigel has previously held several training positions at Bristow Helicopters in both Oil and Gas and SAR; he has over 15 years’ experience as a Type Rating Examiner spanning 3 aircraft types. He acts as a Senior Examiner on behalf of the UK CAA.

2. RORY CUNNINGHAM, OPERATIONS OFFICER, ALPHA AVIATION

Rory has many years of experience in delivering Line Orientated Flight Training via use of Commercial Off The Shelf Simulation to a range of military and civilian organisations. He also flies a range of civilian helicopters in the HEMS and corporate sector giving him an insight into how current regulations are underutilising the capability of cost effective targeted fidelity simulation. Rory is a former Officer in the British Army and has experience in both fixed wing and rotary domains as an instructor and operator.

3. WO DES SHEPPARD-CLAYTON, AVIATION TRAINING MANAGER, UK MINISTRY OF DEFENCE

Des Sheppard-Clayton has been an Army Aviation Crewman for 25 years and an Aviation Gunnery Instructor for 12. Currently the Aviation Weapons Training Manager for the JHC, responsible for all aspects of rotary weapons training.

4. SHAWN COYLE, AUTHOR & TEST PILOT, EAGLE EYE SOLUTIONS, & LEON SMITH, CHIEF PILOT, HELICOPTER SERVICES LTD

Information not available at time of print.

5. DR SUNJOO ADVANI FRAES, PRESIDENT, IDT ENGINEERING

Sunjoo Advani began his career in flight simulation at the University of Toronto Institute for Aerospace Studies in 1988, developing helicopter simulation capability. He then joined the Delft University of Technology as Assistant Professor and to develop SIMONA. He received his PhD from Delft in Aerospace Engineering on the subject of flight simulator motion cueing. He then joined ADSE b.v. where he established the simulation business division, and started International Development of Technology (IDT) in 2005. IDT develops simulators and provides consulting services in flight, ground vehicle and medical rehabilitation simulation. Sunjoo is also an active member of the ICAO 9625 working groups and has co-authored the new Objective Motion Cueing Test. He is the chairman of ICATEE, and a member of the Flight Simulation Group.

6. WAJIH MEMON, PHD STUDENT, UNIVERSITY OF LIVERPOOL

I acquired my first degree in Mechanical Engineering with a Gold and a Silver Medal and MSc in Safety and Reliability Engineering with distinction. I have worked on several projects in my career related to robotics, mechanics, aerospace and modelling and simulation. I am currently pursuing a PhD in Aerospace Engineering at the University of Liverpool, Flight Simulation Research Group. My research is into flight simulation fidelity requirements for the helicopter-ship dynamic interface which is aimed to provide guidance for future helicopter-ship clearance trials, reducing the time, cost and risk associated with the “real-world” testing at sea. I have also been extensively involved in the development and execution of the piloted simulation flight trials in the
HELIFLIGHT-R simulator, related to flight handling qualities, pilot workload/effort, flight model development and simulation fidelity.

NEALE WATSON, PHD STUDENT, UNIVERSITY OF LIVERPOOL
Information not available at time of print.

7. TOM BEERS, SENIOR SOFTWARE ENGINEERING MANAGER, TRU SIMULATION
Tom is the Sr. Flight Dynamics Manager at the Business Aviation Division of TRU Simulation + Training in Tampa, FL. Tom is responsible for the aerodynamics, control loading, motion cueing/vibrations, and Qualification Test Guides that go into TRU’s rotary-wing and fixed-wing simulators. Tom is an experienced flight dynamics engineer who has spent all of his professional career within the flight simulation industry serving both the commercial and military flight training device markets. Over the course of his career he has served in a number of roles including Flight Dynamics Engineer, Project Engineer, and Software Engineering Manager.

8. CAPT RICK NEWSON, FLIGHT OPERATIONS MANAGER, UK CAA
Information not available at time of print.

9. RAY RAWBONE, SL&SS UK MANAGER, LEONARDO HELICOPTERS
Leonardo Helicopter Division's Simulation, Learning and Support Services (SL&SS) as a sub-department within UK Training Operations, is charged with the task to deliver all training equipment in support of the live aircraft product lines. Ray Rawbone has been with the various incarnations of Leonardo Helicopters since 1999. Now as Department Manager, together with Brian Marsh they have been central to the delivery of the AW159 Wildcat and Merlin Mk4 MLSP training capabilities ranging from the facility infrastructure through courseware to FSTDs. Brian is an ex-military aircrew instructor who is now the Delivery Manager for SL&SS working for Ray and is responsible for the Delivery of the training equipment capability to the end-user.

BRIAN MARSH, LEONARDO HELICOPTERS
Information not available at time of print.

10. SHIELA JASZLICS, PRESIDENT, PATHFINDER SYSTEMS INC
Ms. Jaszlics is the President of Pathfinder Systems. She has served as a project manager for many key programs and developed transportation models for the US National Park Service. She developed a role-player automation capability for large scale command and control simulations and Live/Constructive/Virtual training interoperation for the US Army. Since 2006 Ms. Jaszlics has led the company in producing high-fidelity, reconfigurable aircrew trainers for helicopter and fixed-wing aircraft. A graduate of Regis University, she served in the US Army as an intelligence officer, signal officer and a field artillery battery commander. She is the author of numerous technical papers.

KEYNOTE DAY 2 - J. SCOTT DRENNAN, VICE PRESIDENT OF INNOVATION, BELL FLIGHT
Scott Drennan serves as vice president of Bell’s Innovation team. Scott joined Bell in 1993 after receiving a BS in Aerospace Engineering from the University of Maryland and also holds a Masters of Liberal Arts from Southern Methodist University. He is currently a member of the NASA Advisory Council Aeronautics Committee. Scott is proud to carry on Bell’s rich tradition of innovation, with a mission to radically innovate technologies towards novel and coveted vehicle lift experiences. The team leverages Bell’s core competencies and fearlessly embraces disruption to illuminate and secure Bell’s future as an extraordinary technology company.

11. DR BINOY MANIMALA, PRINCIPLE ENGINEER SIMULATION AND MODELLING LEONARDO
Binoy Manimala was awarded a PhD in the area of mathematical modelling of advanced rotorcraft configurations in 2000 by Glasgow Caledonian University. Before moving to Leonardo Helicopters, Binoy worked as a post doctoral research fellow at University of Liverpool. Binoy is been working as a simulation and flight dynamic modelling engineer at Leonardo helicopters since 2008.

12. EGAN GREENSTEIN, SENIOR DIRECTOR, BOEING NEXT ANALYSIS AND EXPERIMENTATION
Egan Greenstein is the Senior Director of Analysis and Experimentation for Boeing NeXt. In this role, he guides a global team in the development of new tools, techniques and analyses for the study of future mobility concepts, driving requirements for these emerging systems. Since joining Boeing in 2005, he has held various leadership, program management, and business development positions, including his most recent role as senior director of autonomous technologies for Boeing Defense Autonomous Systems. Prior to joining Boeing, Egan served on active duty as a US Naval Flight Officer with operational experience leading maritime patrol and reconnaissance combat operations.

13. GEORGE BUTLER, BUSINESS DEVELOPMENT AND SALES MANAGER, THALES
Information not available at time of print.

14. PETER TARTTELIN MRAES, MD AND CONSULTANT, YOURSIM LTD
Peter joined RAE Bedford in 1987 as an Aeronautical Engineering graduate from QMC London. After conducting flight tests and data analysis from Puma and Lynx research platforms, he performed MOD and CAA programmes to research Tail Rotor Failures and improve aircrew advice for several helicopter types. At QinetiQ subsidiary cueSim he managed helicopter FSTD qualifications, conduct of validation data flight test campaigns, and represented cueSim in the ICAO 9625 Vol II IWG. Peter formed YourSim in 2014 and continues to plan and perform helicopter FSTD validation data flight tests as well as providing consultancy to FSTD manufacturer and operator clients.
13. DR EMMA TIMSON, FLIGHT MECHANICS ENGINEER, AIRBUS HELICOPTERS
Emma is a flight mechanics engineer at Airbus Helicopters. She has spent the last 6 years developing the flight-loop simulation for the H160 Full Flight Simulator, which is currently undergoing pilot subjective assessment. Emma was previously a member of the RAeS simulation committee and completed her thesis entitled “Flight Simulation Fidelity for Rotorcraft Design, Certification and Pilot Training” at the University of Liverpool in 2013.

14. MARTIN KEIL, HEAD OF PROJECTS AND SYSTEMS ENGINEERING, REISER SIMULATION
Martin Keil  Director Sales and Business Development at Reiser Simulation and Training.  Mr. Martin Keil is a trained aero space engineer with a history in German Army aviation and a strong background in flight dynamics and flight control design, one time winning the Airbus internal engineering award. Major successes include the on-time and on-quality delivery of RST’s first Full Flight Simulator for an H145 helicopter.

15. NIGEL GATES, TEST PILOT, NOVA SYSTEMS
Nigel joined the Royal Navy in 1991 after graduating from Nottingham with a degree in Mechanical Engineering. He spent 25 years as a Commando Helicopter Pilot, moving the Royal Marines from ship to shore and operating over land in harsh environments from winter in northern Norway to the heat and dust of Helmand Province. He graduated from ETPS in 2011 with the Westland Trophy and half of the Patuxent Shield for the end of course aircraft assessment. With Nova Systems since 2017, he conducts Part 21 flight test for various customers and supports the Norwegian SAR AW101 programme.

16. CAPT DAVID HARRIS, HEAD OF AVIATION STANDARDS, BABCOCK INTERNATIONAL GROUP
Information not available at time of print.

17. JOHN GOODBY, SAI SYSTEMS INTEGRATOR, CHINOOK DELIVERY TEAM, DE&S, MOD
18. DIEGO DEL GOBBO, LEONARDO
Diego Del Gobbo is Head of Flight Control System Department in Helicopter Division of Leonardo S.p.A. He joined Leonardo S.p.A. in 2002 after working as Research Assistant Professor in West Virginia University. Diego earned his PhD and MS in Aerospace Engineering from West Virginia University, after earning his Laurea Degree in Computer Engineering and Automation from University of Pisa, Italy.

CONFERENCE CHAIR: JAMES KENNY MRAeS, RAeS FLIGHT SIMULATION GROUP
James has a background in aeronautical and computational engineering, having conducted post-graduate research in coupling near real-time computational fluid dynamics of helicopter wakes with a piloted simulator. James founded Cursive Simulation, a small company specialising in simulation technology, with projects ranging from whole-crew helicopter tactics simulators to mixed-reality JTAC training. Cursive has developed a strong reputation for exploiting commodity and emerging technologies to enable effective synthetic training. James was technical lead, through Niteworks, for the Defence Operational Training Capability (Air) Programme, working on multi-vendor distributed training architectures and cross domain security. Previously he worked at Dstl in rotorcraft survivability, where simulations and live trials were combined to inform the development of new threat warning technologies and analysing tactics. Currently James is re-focusing on helicopter simulation and working as an adviser to other small businesses.

CONFERENCE CO-CHAIR: DR MARK WHITE MRAeS, RAeS FLIGHT SIMULATION GROUP
Dr White obtained his PhD at The University of Liverpool in the field of structural crashworthiness. He is the head of the Aerospace Engineering Division at the University of Liverpool where he is a Senior Lecturer and academic lead for flight simulation activities. For the last 10 years he has led the development of real-time piloted simulation tools for helicopter operations in harsh environments. He leads the piloted simulation activities in the area of the helicopter-ship dynamic interface, developing fidelity requirements to support First of Class Flight Trials for future Royal Navy vessels and improved ship aerodynamics for helicopter launch and recovery operations. His rotorcraft simulation fidelity research activities also include collaboration and flight testing with the National Research Council of Canada using their fly-be-wire Bell 412 research helicopter. This research forms the UK’s contribution to a NATO research group (AVT-296) activity on rotorcraft modelling improvements and assessment methods.

He is the deputy-chair member of American Helicopter Society’s Modelling and Simulation Technical Committee and is a member of the Royal Aeronautical Society’s Flight Simulation and Rotorcraft Specialist Groups.

SESSION CHAIR: GORDON WOOLLEY FRAeS
Gordon Woolley served in the RAF a helicopter pilot from 1965, retiring in the rank of Group Captain in 1996. He joined the Medium Support Helicopter Aircrew Training Facility project in 1997, as the Medium Support Helicopter Aircrew Training Facility project development pilot and support co-ordinator. From 2000 to 2012 he managed the MSHATF Tactical Control Centre, and led on operational and training scenario design, and networked collective training issues. He is a Fellow of the Royal Aeronautical Society and past- Chairman of the Flight Simulation Group, the IPTA Helicopter Mission Training Workstream, and co-chairman of
the ICATEE Steering Committee.

SESSION CHAIR: ADRIAN ALFORD
Adrian has worked for Leonardo Helicopters since 1989. His work initially focused on helicopter flight control research. But his current focus is total aircraft simulation to support integration rigs, aircraft development and training. Adrian was a principal software developer for the Wildcat Training Centre at RNAS Yeovilton. In June 2019, he became a committee member of the Flight Simulation Group.

SESSION CHAIR: BARRY TOMLINSON FRAeS
Barry Tomlinson worked in flight simulation and synthetic environments for more than 40 years. For most of this time he was a research scientist for the UK Ministry of Defence, conducting studies at the Royal Aircraft Establishment Bedford (later DRA/DERA) on future aircraft and helicopter requirements, developing advanced simulation technology in the fields of computing, modelling, and environmental representation, and advising on technical requirements for aircrew flight simulation training systems. In NATO he was the UK official member, and then Chairman, of the AGARD Flight Vehicle Integration Panel. He chaired several NATO studies, most recently the Mission Training Through Distributed Simulation Task Group, which conducted the First WAVE capability demonstration of secure distributed simulation. He is a member of the Flight Simulation Group committee at the Society, and is a Fellow of the RAeS.

SESSION CHAIR: JOHN COOK, RAeS FLIGHT SIMULATION GROUP
For over 35 years John Cook has worked in aviation training, simulation, safety critical airborne systems, and security technologies worldwide. Starting as an engineering apprentice and progressing through commissioning, design, qualification, project management, joint ventures, workshare programme leadership, global business development, and, operational transformation positions; he has cooperated extensively with most major manufacturers, operators and regulators to deliver advantage and secure their operations. Beginning at Redifon Simulation, then Hughes Aircraft, Smiths Industries, Thompson CSF, Thales and Virgin Atlantic; he has seen the aviation industry through the various lenses of shop floor, design office, regulatory, programme and product management, sales and business development, training management, operational delivery, and transformation; in roles from supplier/developer through partner to end operator, and consultant. Major projects undertaken include new training system technologies and aircraft types; airborne systems including engine controls, antenna and communications systems; operational transformation through efficient adoption of new technology; business development in a range of markets; and security products based on emerging deep learning and artificial-intelligence capabilities. John is currently engaged on a range of projects with clients ranging from start-ups through to major established companies.

SESSION CHAIR: DR STEVE HODGE FRAeS, RAeS FLIGHT SIMULATION GROUP
Steve joined BAE Systems in 1998 after graduating from the University of Central Lancashire. Since then he has worked in the Simulation department on a variety of different projects. Currently, his primary responsibility is for modelling and piloted simulation of the F-35B Lightning II and Queen Elizabeth Class (QEC) aircraft/ship interface. Between 2003 and 2010 Steve studied part-time for a PhD degree at the University of Liverpool on the subject of modelling and simulation of the aircraft/ship interface. Steve now holds the honorary position of Visiting Research Fellow at the same University, where he acts as an industrial supervisor for a number of related projects. Steve is a member of the Royal Aeronautical Society, The Institution of Engineering and Technology and the Vertical Flight Society, and serves on the Royal Aeronautical Society’s Flight Simulation Specialists Group.

SESSION CHAIR: ANDY FAWKES, RAeS FLIGHT SIMULATION GROUP
Andy Fawkes is an independent consultant and engineer working principally in the field of training and simulation and is a regular conference chair and speaker on developments in simulation, training and technology. He is the Deputy Editor of Military Simulation & Training, has led a number of research projects for Bohemia Interactive Simulations, and is a Vedette Consulting Associate. He has many years’ experience in defence management and procurement and is a former head of simulation policy for the UK MoD and Chair of the NATO Modelling and Simulation Group.