

**NORTH ATLANTIC TREATY ORGANISATION  
ORGANISATION DU TRAITÉ DE L'ATLANTIQUE NORD**



## **NATO Science and Technology Organization System Analysis & Studies Panel**

**SAS-137 Symposium on Integration of Women  
into Combat Units**



**Gray Research Center, Marine Corps University  
Quantico, Virginia, United States  
5-7 February 2019**

## SAS-137 Conference Programme

<b>Wednesday, 6 February 2019</b> Gray Research Center Auditorium		
0800	Registration	
0900	Welcome and Administrative Remarks Program Committee	
0915	Keynote Speaker LtGen Lori E. Reynolds, Deputy Commandant for Information (USMC)	
1000	SAS-120 Research Task Group Integration of Women into Ground Combat Units (CAN, GBR, NOR, USA)	
1030	BREAK	
1100	1) Combat Integration Handbook Antonietta Rico, Ellen Haring, Carolyn Washington, and Inga Brown (USA)	
1130	Keynote Speaker Maj Sandra Perron (Canadian Armed Forces ret.)	
1200	LUNCH	
	<b>Women in Combat Roles:                      Reflecting on Past Experience,                      Strategies for the Future</b>  <b>Moderator: Mr. Mark Watton                      (GBR)</b>	<b>Physical Standards (1)</b>  <b>Moderator: Capt Ben                      McCaleb (USMC)</b>
1330	2) LtCol Maureen Wellwood (CAN)  <i>Conformist Culture and Tolerance of Diversity</i>	7) Mr. Brian McGuire (USA)  <i>USMC Combat Arms Physical Screening</i>
1400	3) Dr. Gerhard Kümmel and Timo Graf (DEU)	8a, 8b, 8c, 8d) Dr. Tara Reilly (CAN), Dr. Jace Drain (AUS), Dr. Sam Blacker (GBR), Mrs.

	<i>Self- and Other Perceptions of Military Performance of Men and Women in the Bundeswehr</i>	Marilyn Sharp (USA), and Dr. Keith Hauret (USA)
1430	4) Col Stephane Boucher (CAN) <i>Team D+ Innovation in Diversity</i>	<i>Combat Integration: Implications for Physical Employment Standards (NATO HFM RTG 269)</i>
1500	BREAK	
	<b>Gender and Warrior Culture: Impacts on Integration</b>  <b>Moderator: Mr. Mark Watton (GBR)</b>	<b>Physical Standards (1)</b>  <b>Moderator: Capt Ben McCaleb (USMC)</b>
1530	5) Dr. Angela Yarnell, Jessica Kim, Dr. Katie Nugent, and Dr. Karmon Dyches (USA) <i>Women in Combat: Stress, Social Support and Health</i>	<i>Combat Integration: Implications for Physical Employment Standards (NATO HFM RTG), continued</i>
1600	6) Dr. Brad Wineman (USA) <i>Gender Integration and Citizenship: A Civil-Military Perspective</i>	9) Mr. Brian McGuire (USA) <i>Implementation of A Hybrid Pushup/Pullup Test on the USMC Physical Fitness Test</i>

## Thursday, 7 February 2019

Gray Research Center Auditorium

0830	Opening Welcome Program Committee	
0845	10) LT Andrea Goldstein <i>NATO Representative for Women Peace and Security</i>	
	<b>Integrating Women into Combat Roles: Current Experiences (1)</b>  <b>Moderator: Maj Heather Hynes (CAN)</b>	<b>Gender and Operations: Challenges and Opportunities</b>  <b>Moderator: Dr. Alexandra Kindell (USA)</b>
0915	11) Dr. Liliana Brožič and Col Mojca Pešec (SVN)  <i>Integration of Women into Ground Combat Units: Slovenia as an Example of a Successful but Small Country</i>	19) Maj Héloïse Goodley (GBR)  <i>Implications Of The Integration Of Women in Ground Close Combat Units for UNSCR 1325, and the Women, Peace and Security Agenda</i>
0945	12) Dr. Samantha Cromptoets and BRIG Leigh Wilton (AUS)  <i>The Integration of Women into the Australian Army Infantry Corps: Dimensions for Success</i>	20) Dr. Shilpi Nanglu (IND)  <i>Challenges of Integration of Women in Peacekeeping Operations</i>
1015	BREAK	
	<b>Integrating Women into Combat Roles: Current Experiences (2)</b>  <b>Moderator: Maj Heather Hynes (CAN)</b>	<b>Gender and Military Strategy: Implications for Integration</b>  <b>Moderator: Dr. Alexandra Kindell (USA)</b>
1045	13) Dr. Joanna Harvey (GBR)  <i>Infantry Perceptions and Potential Mitigations of Women Joining the UK Infantry</i>	21) Dr. Amy Murphy (GBR)  <i>UK-India Human Sciences Collaboration: Gender - Differences in the Military for Two Different Cultures</i>

1115	14) Ms Antonieta Rico (USA)  <i>Understanding Differences in Experiences Between Enlisted Women and Officers</i>	22) Mr. Mark Watton (GBR)  <i>Recruit Experiences Of The Re-Introduction of Mixed Gender Basic Training for Non-Infantry</i>
1145	15) LTC Junko Araki (JPN)  <i>Promoting Active Participation of Women in Japan Ground Self Defense, Force: Female Integration into Close Combat Units</i>	23) LT Andrea Goldstein  <i>Understanding Resistance to Women in Combat Jobs</i>
1215	LUNCH	
	<b>Gender and Military Experience: Implications for Integration</b>  <b>Moderator: Dr. Amy Murphy (GBR)</b>	<b>Organizational Strategy: Implications for Integration</b>  <b>Moderator: Dr. Alexandra Kindell (USA)</b>
1330	16) WO1 Gareth Bowen (GBR)  <i>The UK approach to WGCC</i>	24) Maj Jen O'Connor (GBR)  <i>The Experiences of Female Officer Cadets at the Royal Military Academy Sandhurst</i>
1400	17) Flt Lt Jon Giffin (GBR)  <i>RAF Regiment Training Wing</i>	25) Dr. Karen Davis and Dr. Anne-Renee Blais (CAN)  <i>Socio-Cultural Change in Gender and Military Context: Measuring Values</i>
1430	18) Frank Steder and Nina Rones (NOR)  <i>The Queen Bees and the Women's Team; Why Make a Special Platoon for Women?</i>	26) LTC Kristina Richardson (U.S. Army)  <i>Architecting a Paradigm Shift to Further Invest in Human Capital</i>

Gray Research Center Auditorium	
1530	Technical Evaluator Analysis and Summary Dr. Ellen Haring
1600	SYMPOSIUM CLOSING

## SAS-137 Programme Committee



**Mrs. Laura Chewning**  
Co-Chair

United States Marine  
Corps



**Dr. Karen D. Davis**  
Co-Chair

Defence Research &  
Development, Canada



**Mr. Frank Steder**  
Member

FFI, Norwegian  
Defence Research  
Establishment



**Dr. Joanna Harvey**  
Member

Army Personnel  
Research Capability,  
UK



**Mr. Jeroen  
Groenevelt**  
SAS Panel Assistant

NATO Science &  
Technology  
Organization



**Lt Col. Timothy J.  
Povich, PhD**  
SAS Panel Executive

NATO Science &  
Technology  
Organization



**Dr Ellen Haring**  
Technical Evaluator

Servicewomen's  
Action Network, USA

## Keynote Speakers



**Lieutenant General Reynolds** was commissioned in May 1986 upon graduating from the U.S. Naval Academy and assigned as a Communications Officer. As a Company grade officer, she served in various billets at 1st Marine Division Communications Company, Marine Wing Communication Squadron 18 in Okinawa, Marine Corps Systems Command, and 9th Communication Battalion, I MEF. As a Field Grade officer, she was selected to command Recruiting Station Harrisburg PA and then served as an Action

Officer and Division Head at HQMC C4. She was selected to command 9th Communication Battalion in 2003 and deployed the battalion to Fallujah Iraq in support of I MEF during Operation Iraqi Freedom II. She was subsequently assigned to duty with the Joint Staff J6 in Washington DC where she was an Action Officer and Division Head. Col Reynolds assumed command of 1 MEF Headquarters Group in 2009 and deployed the Group to Helmand Province Afghanistan in support of I MEF and RC Southwest during Operation Enduring Freedom.

As a General Officer, she commanded Marine Corps Recruit Depot Parris Island/Eastern Recruiting Region from 2011-2014, was the Principal Deputy to the Deputy Assistant Secretary of Defense South and Southeast Asia in OSD Policy from 2014-2015 and commanded Marine Corps Forces Cyberspace Command from 2015-2018. LtGen Reynolds has commanded at every rank. Her professional military education includes The Basic School, the Basic Communication Officer's Course, Command and Control Systems Course, the Naval War College and the Army War College.

She has earned Master's Degrees from both the Naval War College and the Army War College. Her personal decorations include the Defense Superior Service Medal with oak leaf cluster, Legion of Merit, Bronze Star, Meritorious Service Medal (with gold star), the Navy and Marine Corps Commendation Medal (with gold star).



**Sandra Perron, CD, MSc**, is a senior partner with A New Dynamic Enterprise Inc, specializing in Organizational Behaviour, Leadership and Diversity Training. She is the bestselling author of *Out Standing in the Field*, a memoir about her career as Canada's first female infantry officer. Her book has been touted by *Macleans* as an 'incredible' memoir, by the *Globe and Mail* as "extremely worthwhile, timely and important" and by Margaret Atwood as a "must read". The Jury for the Shaunessy Cohen Prize said "there is not an ounce of self-pity in this book." It is the story of friendships, triumphs, and standing by one's convictions in the face of adversity.

Sandra served in the Royal 22e Régiment, the famous "Vandoos". She deployed for 2 United Nations peacekeeping tours in Bosnia and Croatia as an anti-tank platoon commander during the war in former Yugoslavia. Her unit lost a soldier to mortar fire during her first tour, and her platoon hit three anti-tank mines during her second tour, gravely injuring one soldier. She left the military in 1996 after enduring unrelenting abuse from her fellow officers who didn't want women in combat arms and then went on to become an executive with General Motors, and then Bombardier Aerospace. But she couldn't leave the military behind.



She's served on numerous Military Boards for employment equity, the Royal Military College and is currently a member of the Board of Directors for the Corps of Commissionnaires in Québec as well as the Perley and Rideau Veteran's Health Center. She is also the founder of the Imagine Project, a non-profit organization mentoring an orphanage in Boma, Tanzania for children with albinism.

## Technical Evaluator



**Dr. Ellen Haring** is the CEO of the Service Women's Action Network (SWAN). SWAN is a non-profit that supports, connects and advocates for service women; past, present, and future. She is also a senior fellow at Women in International Security where she directs the Combat Integration Initiative. Haring's research and work focuses on women and gender in the military.

She is a West Point graduate and a retired U.S. Army colonel. She holds a PhD in Conflict Analysis and Resolution and she is an Adjunct Associate Professor at Georgetown University where she teaches courses on Human Security and Women, Peace and Security. She has taught at the US Army's Command and General Staff College and the US Army War College. Haring has published numerous articles and papers on a wide array of military and security related topics. She has been a guest speaker on foreign and domestic news shows including: CNN, PBS News Hour, National Public Radio, BBC Radio, and Voice of America. She guest lectures and has been invited to address members of Congress.

## Abstracts and Presenter Bios

### 1) Combat Integration Handbook: A Leader's Guide to Success

*Antonieta Rico is a Fellow at Women in International Security where she works for the Combat Integration Initiative, supporting a gender perspective in military operations and organizations. Her research focuses on the integration of women into combat arms units in the US military. She most recently worked as the Director of Communications and Policy at the Service Women's Action Network (SWAN), the leading national organization advocating for service women and women veterans. She served in the U.S. Army from 2001 to 2008, working as a military journalist and public affairs NCO. She has served in Iraq and embedded with various Army and infantry units during day-to-day missions and combat operations. She has worked as Deputy News Editor at Army Times and Navy Times, reporting on the Coast Guard, training cycles, gender integration and military quality of life issues. She has also interned at National Geographic Magazine, and has been published in TIME, USA Today, Task & Purpose, Connecting Vets and other outlets. She holds a Master of Science in Foreign Service, with a concentration in Global Politics and Security, from Georgetown University and a Bachelor of Arts in Communication from George Mason University.*



*Antonieta Rico, Ellen Haring, Carolyn Washington, and Inga Brown, Women In International Security, Washington, DC*

The Combat Integration Handbook gives leaders, from brigade-level to the company-level, practical guidance on how to successfully navigate women's integration in their combat arms units. While the military has done some work to prepare the branches for women's integration, there is no reference guide that leaders and soldiers at the ground level can use to address day-to-day questions. The Combat Integration Handbook fills that gap. The Handbook is intended for use at the unit-level, to serve as a guide for brigade, battalion, and company-level

leaders, as well as the service women and men undergoing the process. The Handbook addresses leader's and service member's concerns and questions in regard to women's integration of ground combat arms units and provides best practices. Topics addressed include billeting, fraternization, pregnancy, field exercises and physical training. The Handbook is based on research of previous efforts integrating women into regular military and combat units, as well as interviews with Cultural Support Team members (women who were attached to Special Operations units in Afghanistan), interviews with combat arms officers and NCOs, and input from a working group of military and civilian experts.

## 2) Conformist Culture and Tolerance of Diversity

LtCol B. Maureen Wellwood. Canadian Army, 2 Canadian Division Training Centre, Valcartier, Canada

### ***B. Maureen Wellwood, MDS, MEd, CD***

*Born in London, Ontario, Maureen Wellwood started her military career at the age of 18. After attending military college, she completed infantry officer training in 1995 and joined the Royal 22e Régiment.*

*Maureen deployed to ex-Yugoslavia (96-97), Bosnia (99-00), and Kandahar, Afghanistan (09-10). She also participated in two domestic operations, including the 1998 ice storm in the Montreal area and the flooding near Saint-Jean-sur-Richelieu in 2011.*

*Promoted to her current rank in January 2016, she is the first woman in the Canadian Infantry to attain the rank of Lieutenant-colonel. In April 2018, she was recognized as one of the Top 20 Women in Defence in Esprit de corps' "Breaking Down the Barricades" and has since been recognized as one of the 2018 Top 100 Canada's Most Powerful Women.*

*Maureen is a Bachelor of Military and Strategic Studies from Collège militaire royal de Saint-Jean, a Master of Defense Studies from Royal Military College, and a Master of Leadership in Education from Yorkville University.*



This paper focuses on the influence of cultural factors of gender integration in the military, specifically relating to the domains of 1) cultural, behavioural and attitude change and 2) group dynamics, conformity and cohesion. The purpose of this paper is to analyse the potential impact of including more diversity-oriented policies and approaches on the culture of inclusion in the Canadian military. Despite the CAF objective of creating an inclusive culture, the organisation's personnel policies and training system remain restrictive and conformist. I posit that the CAF encourages an exclusive and conformist culture through these policies, thereby hindering the organisational objectives of diversity and inclusion, which have gained increasing importance within the

CAF since the media attention surrounding incidents of sexual misconduct, the subsequent external review in 2015 and the ensuing development of Operation Honour. The conformist culture of the CAF being one that encourages all members to conform to a common standard in all aspects, this research identifies how the Canadian Armed Forces (CAF) could recognize diversity in training and personnel policies, with a view to contributing to the overall culture of diversity and inclusion. The research uses the systematic literature review as methodology and discourse analysis as method; the study is limited to the boundaries of the literature data. Through the theoretical lenses of diversity, the study provides insight into the link between the conformist culture of the CAF training and personnel policies and its effect on the culture of inclusion by means of its impact on diverse learning needs. The material is largely drawn from a Major Academic Report completed within a Master of Education (Leadership in Education) Program at Yorkville University completed in August 2018. The paper has been adapted to address more specifically the interests of this symposium.

### 3) Self- and Other-Perceptions of Military Performance of Men and Women in the Bundeswehr

*Dr. Gerhard Kümmel was born in 1964 and studied Political Science, Sociology and History at Philipps-University Marburg (1985-91). He was a PhD scholar of the Friedrich-Naumann-Foundation (1991-94) and a Research scholar of the German Historical Institute, Washington, D.C. (1992). For his dissertation he received the J. William Fulbright PhD Award (1996). In 1997, he was a Lecturer of the German Academic Exchange Service at the University of Victoria in Victoria, B.C., Canada. In 1997, he joined the Bundeswehr Institute of Social Sciences in Strausberg which in*



*2013 was transferred to the Bundeswehr Center of Military History and Social Sciences in Potsdam where he currently works as a Senior Researcher in the Department of Military Sociology. Since 2007, he is Lecturer for Military Sociology in the Master Program "Military Studies" and "Peace and Conflict Studies" respectively at Potsdam University. From 2010-2014, he was President of the Research Committee 01: Armed Forces & Conflict Resolution (RC 01) within the International Sociological Association (ISA). His current research focusses on women in the armed forces and veterans.*

*Gerhard Kümmel & Timo Graf. Bundeswehr Center of Military History and Social Sciences, Germany.*

The paper first sketches the history of women's participation in the German armed forces up to. In a second step, empirical findings from previous studies on the integration of women into the Bundeswehr are presented, which leads the way to the analysis of self- and other-perceptions of service performance perceptions as such perceptions may very well influence the social interaction in combat situations. This analysis finds the most skepticism about the performance of women soldiers among combat and ground soldiers who may accordingly be made the special target of gender trainings.

#### 4) TEAM D+: Innovation in promoting diversity

*Col Stéphane Boucher joined the Canadian Forces in June 1987 and graduated from Collège Militaire Royal de St Jean (CMR) in May 1992.*

*He commanded the Canadian Forces Joint Nuclear, Biological, Chemical Defence Company (later renamed Canadian Joint Incident Response Unit (CJIRU)) from 2005 to 2007. This command provided him the opportunity to work with several other government departments (including the RCMP and Health Canada) and ensure its transfer to the Canadian Special Operations Forces Command. He then commanded 5e Régiment d'artillerie légère du Canada (5e RALC) from May 2009 to August 2011. Previously, he served twice with 5e RALC in various capacities, including two Battery Commands: Romeo and Headquarters batteries.*



*Colonel Boucher has also served twice as an instructor. First as an Instructor in Gunnery (IG) with the Royal Canadian Artillery School and then as a member of the Directing Staff at the Canadian Land Forces Command and Staff College. He also served with the Army Staff, the Defence Renewal Team and as Chief of Staff 2nd Canadian Division, and finally as Special Advisor to the Chief of the Defence Staff. He is currently serving as Commanding Officer of the 2nd Canadian Division Support Group.*

*Colonel Boucher is a graduate of the Canadian Land Forces Command and Staff College, Kingston, and the Canadian Forces College, Toronto. He is also a graduate of the National War College, National Defense University in Washington D.C. He has a Bachelor's degree in Military and Strategic Studies with Honours from CMR de St Jean, Master's Degree in War Studies and a Master's in Defence Studies from Royal Military College Kingston. He also has a Master's in Science of National Security Strategy.*

*He has deployed to Bosnia and Afghanistan. While serving as the Senior Advisor to the Afghan National Army Chief of Operations (G3) he was awarded the Bronze Star by the United States Army.*



*Col Stéphane Boucher, Commander, 2nd Canadian Division Support Group.  
Canadian Arm Forces.*

The Canadian Armed Forces (CAF) is a reflection of Canadian society, and in order to promote the increased diversity of Canada published the Canadian Armed Forces Diversity Strategy in 2017. The CAF leadership endorsed the strategy at all levels, explicitly supporting its members as they promoted the principles contained in the strategy. Within 2 Canadian Division Support Group, members approached the Commander to create Team Diversity + (D+) to not only support the strategy but promote the inclusion of all groups into the Canadian Military. The strength of the group comes from the fact that it is volunteers which are interested and vested in the promotion of the principles in the Strategy, and not directed uniquely by the chain of command. The Team D+ membership not only proposed solutions to problems, but ideas on how to promote diversity, and engage stakeholders inside and outside the CAF. Team D+ has had successes since its creation, and those successes suggest that it could have enabled the integration of women into Canadian Army combat units thirty years ago. More importantly, the Team D+ construct could probably assist militaries going through the integration process today.

## 5) Women in Combat: stress, social support and health

*Major Angela Yarnell is a Distinguished Military Graduate of Indiana University of Pennsylvania, where she earned her bachelor's degree in Criminology and Psychology in 2005 and commissioned into the Army's Medical Service Corps. In this capacity she was assigned to 2d Stryker Cavalry Regiment and served 15 months in Iraq. Angela's military awards include the Meritorious Service Medal; Bronze Star Medal for service in Iraq; two Army Commendation Medals; and two Army Achievement Medals. She has a Master's and PhD in Medical Psychology from the Uniformed Services University of the Health Sciences. As an Army Research Psychologist she has served as the Deputy Branch Chief of Behavioral Biology and Chief of the Sleep Research Center at the Walter Reed Army Institute of Research. Her research emphasis is psychophysiology and she has investigated the topics of stress and resilience, especially sex differences in stress responses, concussion, effects of repetitive blast exposure, and sleep and performance in the military. Dr. Yarnell is currently an Assistant Professor in the Behavioral Science and Leadership Department at the United States Military Academy at West Point, NY.*

*Dr. Yarnell, Angela, Dr. J. Kim, Dr. K. Nugent, and Dr. K. Dyches, United States Military Academy, Walter Reed Army Institute of Research*

Few efforts have been dedicated to understanding experiences of female Service members. This study offers insight into the perceived social support from the unit, physical health, and combat experiences of deployed females. Survey responses from deployed Service members were assessed retrospectively. Surveys were collected by Mental Health Advisory Teams between 2005- 2012. The original sample included 570 females and 4,759 males. To investigate differences between males and females a matched sample was created based on key variables. Concerning social support, females reported significantly lower unit morale, unit cohesion, and marital quality. In terms of exposure to stressors, females reported significantly less combat exposures, yet did not differ from males in their report of other stressful life events during deployment. For health and functioning, women reported significantly more somatic symptoms and sick call visits than men, yet did not differ significantly on several other physical health variables. Health

outcomes investigated in relation to combat exposure, found men but not women reported significantly greater functional impairment as the number of combat exposures increased. Both males and females reported more somatic symptoms, more sick call visits, greater difficulty falling asleep and sleeping less than six hours per night as combat exposures increased. Importantly, the association between combat exposure and several health variables were similar for males and females. Defining, understanding, and then fostering social support is necessary for males and females to ensure readiness for military missions by reducing effects of stress on health.

## 6) Gender Integration and Citizenship: A Civil-Military Perspective

*Dr. Wineman is professor of military history at the US Marine Corps Command and Staff College, Marine Corps University in Quantico, Virginia where he joined the faculty in July 2008, serving as War Studies Department head from 2012-2015. Prior to this position, he has served as an Assistant Professor in the Department of Military History, U.S. Army Command and General Staff College (2006-2008) and as an Adjunct Professor in the Department of History at the Virginia Military Institute (2003-2006). He received his B.A. in History from the Virginia Military Institute and earned his M.A. and PhD (from Texas A&M University. His other teaching duties currently include the Georgetown University Security Studies Program and the Elliot School of International Affairs at George Washington University where he offers courses in civil-military relations and strategy & policy. Dr. Wineman has also served as an enlisted reservist in the United States Marine Corps Reserves for the past 20 years with deployments to Iraq and Afghanistan, and is presently assigned to Personnel Studies & Oversight Office (PSO). He has published various works on the relationship between the military and civilian society.*



*Dr. Bradford A. Wineman. United States Marine Corps Command & Staff College. Marine Corps University*

A summary of the arguments protesting the integration of women into combat roles nearly all center around two main premises: physiology and readiness. This essay intends to move the discussion of this topic away from these two problematic criticisms to a conversational space of greater social and philosophical significance. Rather than fixating on the question of “how much can a woman carry?” the inquiry should instead focus on “who serves and why?” and “who matters?” both within the military and American society. Solutions to reconcile the difference in physical capabilities between men women in the armed forces will eventually be found. It is then a greater

imperative to engage the challenging philosophical and socio-cultural questions that the impact of all this debate and change on national civil-military relations. I argue in this piece that the operative concept in this intellectual debate is not “physical strength” but instead “citizenship.” The past cases of the armed forces having to engage in social equality issues, the perennial debate of “rights versus readiness” may be false dichotomy. For each instance where issues such as this have reached national attention, the egalitarian social reform forced upon the military have never identifiably caused a regression in their fighting capability. In fact, more evidence exists that it has always improved it. So possibly it should not be a “rights” or “readiness” as an outcome of this decision. This essay asserts that the US military could actually have both.

## 7) USMC Combat Arms Physical Screening

### Implementation of a hybrid pushup/pullup test on the USMC Physical fitness Test

*Mr. Brian J. McGuire was raised in Dover, DE. He graduated from Salisbury University in Salisbury, MD with a Bachelor's Degree in Physical Education in 1985. In 2001, he earned a Master's Degree in Exercise Science from Georgia State University in Atlanta, GA. He has earned certifications from the American College of Sports Medicine, National Strength and Conditioning Association and National Athletic Trainers Association.*



*Mr. McGuire has held a number of positions in the Sports Medicine and Strength and Conditioning field. From 1993-1997, he worked in the Emory Clinic Department of Orthopedics in Atlanta, GA and from 1997-2001, he served as the Head Athletic Trainer at Emory University. During the 1996 Olympic Games in Atlanta, he served as Chief Athletic Trainer for Rowing and Canoe/Kayak (Sprint). In 2005 and from 2007-2012, he worked as an augment Athletic Trainer/Strength Coach for the Indianapolis Colts during summer training camps. He has also been the Lead Athletic Trainer for the National Football League (NFL) Scouting Combine since 2008. He also works for the NFL on game days as an Athletic Trainer Injury Spotter.*

*He retired as a Colonel from the Marine Corps Reserve in January 2016. His military decorations include the Defense Superior Service Medal, Legion of Merit, Bronze Star Medal, along with various unit and campaign awards.*

*Mr. McGuire is employed as a civil servant by TECOM as Deputy Director, Force Fitness Division. He was the lead for development and implementation of the USMC Sports Medicine and Injury Prevention program, Combat Fitness Test and MOS Specific Physical Standards. He manages other policies and programs related to general and occupational fitness testing, sports medicine/injury prevention and coordinates associated research. In 2017, he received the Department of the Navy Superior Civilian Service Award.*

## 8) Combat Integration: Integration for Physical Employment Standards (NATO HFM RTG 269)

*Dr. Tara Reilly is a graduate of Dalhousie University, Canada, with an honors and Masters of Science in Biomechanics/Occupational Ergonomics. Tara completed her PhD at the University of Portsmouth, UK in the area of occupational physiology.*



*Tara's research in the past has focused on sea survival and Personal protective equipment design, environmental physiology, and exercise physiology however her PhD and her responsibilities as Scientific Officer with the Canadian Armed Forces are focused on physical employment standard development for various emergency occupations and the Canadian Armed Forces, specifically the Canadian Army. Tara is a co-chair of the defense women's advisory organization, the chair of the NATO RTG HFM 269: Combat Integration: Implications for Physical Employment Standards, and chair of the scientific committee for the upcoming 5th International Congress on Soldier's Physical Performance (2020, Quebec City).*

*Tara currently works with the Human Performance Research and Development team within the Department of Fitness at Canadian Forces Morale and Welfare Services, and fields questions within the CAF with regard to combat integration relevant to the domain of "physical capabilities". She is currently developing a longitudinal injury surveillance protocol to identify gender specific intrinsic and risk factors and their relationships between specific components of fitness for the CAF.*

**Mrs. Marilyn Sharp** has been a research exercise physiologist and principal investigator in the Military Performance Division at the US Army Research Institute of Environmental Medicine, Natick, MA since 1984. She has a Master of Science in Exercise Science from the University of



*Massachusetts-Amherst. She was the Deputy Director for the Neurofibromatosis Research at the US Army Medical Research and Materiel Command, Frederick, MD. She has served on numerous NATO panels and as a SME for women in the military. Her line of research has focused on physical employment standards, military task performance and physical training to improve soldier performance and control injuries. She has focused on soldier performance of physically demanding tasks with specific emphasis on manual materials handling (load carriage, repetitive lifting, lifting and carrying). She has been involved in studies to develop pre-enlistment screening procedures (Occupational Physical Assessment Test), to identify physical factors associated with acceptable performance for field artillery and light wheeled vehicle mechanics, to determine optimal training procedures for lifting and load carriage, and to identify risk factors for injury in basic combat trainees as well as incumbent soldiers. She has authored or co-authored over 100 publications and more than 30 invited presentations*

*Dr. Tara Raily, HP R&D Canadian Forces Morale and Welfare Services*

*Dr. Jace Drain, Defence Science and Technology Group (DST), Melbourne, AU,*

*Dr. Sam Blacker, University of Chichester, Chichester, UK*

*Mrs. Marilyn Sharp, U.S. Army Research Institute for Environmental Medicine, Natick, USA*

*Dr. Keith Hauret, U.S. Center for Health Promotion, Aberdeen Proving Ground, USA*

This series of papers reviews the outputs of RTG HFM 269 Combat Integration: Implications for Physical Employment Standards (PES). The aims of the group, and the outputs for the final report are to identify best practices for the development of Physical Employment Standards in Combat Integration. Specifically:

- (1) Develop research advice for designing PES to minimize inherent sex bias and agreed definition of terminology;
- (2) Provide advice and guidance on injury prevention strategies with Combat Integration by:
  - a. Facilitating international research efforts to monitor musculoskeletal injury (MSkl) risk in longitudinal investigations;



b. Identifying female specific training strategies for achieving and maintaining PES.

(3) Produce a final technical report with a framework and practical recommendations for designing PES considering Combat Integration, supported by a comprehension compendium of all available related research, and current military PES.

The views expressed in this abstract are those of the authors and do not reflect the official policy of the Department of Army, Department of Defense, or the U.S. Government.

## 9) Implementation of a hybrid pushup/pullup test on the USMC Physical fitness Test

*Mr. Brian J. McGuire was raised in Dover, DE. He graduated from Salisbury University in Salisbury, MD with a Bachelor's Degree in Physical Education in 1985. In 2001, he earned a Master's Degree in Exercise Science from Georgia State University in Atlanta, GA. He has earned certifications from the American College of Sports Medicine, National Strength and Conditioning Association and National Athletic Trainers Association.*



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*Mr. McGuire is employed as a civil servant by TECOM as Deputy Director, Force Fitness Division. He was the lead for development and implementation of the USMC Sports Medicine and Injury Prevention program, Combat Fitness Test and MOS Specific Physical Standards. He manages other policies and programs related to general and occupational fitness testing, sports medicine/injury prevention and coordinates associated research. In 2017, he received the Department of the Navy Superior Civilian Service Award.*

## 10) Integration of women into ground combat units – Slovenia as an example of a successful but a small country

**Liliana Brožič** holds a bachelor's degree in organizational sciences, a master's degree in social sciences and PhD in the sociology of science. She started her career at the Ministry of Defence of the Republic of Slovenia in 1996. Until the end of 2005, she worked at Intelligence and Security Service, mainly in the field of security clearances, personnel and education.

Her next position was in the Personnel Section of the Ministry of Defence, where she was mainly in charge of the cooperation between the Slovenian Armed Forces and public educational institutions in the field of military education. She joined the Slovenian Armed Forces as Head of the Military Education System Section in 2008. Two years later, she became the executive editor of the *Contemporary Military Challenges*, the scientific professional publication published by the Slovenian Armed Forces.



She is Associate Professor at the Faculty of Government and European Studies and at the New University, where she specialises in security studies. Between 2016 and 2018 she was Vice-Dean for student and studies affairs at the Faculty of Government and European Studies. In the academic year 2017/2018, she was appointed Acting Dean at the same faculty and was also a chief lecturer at the General Staff Course of the Slovenian Armed Forces, where she was responsible for the subjects Security Sector and Society, and Final Paper Writing. She has authored a number of articles in Slovenian and English.

**Colonel Pešec** holds a bachelor's degree (1988), master's degree (2007) and PhD (2015) from the University of Ljubljana. She joined the professional armed forces in October 1991. During her career she worked mainly in the area of military



*education and training development, holding the position of Chief of the Military Training Division at General Staff. She was responsible for the area of military education and training within the 2009 Defence Sector Strategic Review. Between 2011 and 2013, she served as Commander of the Officer Candidate School. Her other positions within the Slovenian Armed Forces include Chief of Staff, 1st Brigade; Chief of CHOD's Office, and Chief of the Strategic Planning and Policy Division at the General Staff.*

*She graduated from the Army Command and General Staff Course in the USA, and, in 2011, from the U.S. National War College as the first Slovenian and international female officer.*

*From 2005 to 2008, she worked at NATO Allied Command Transformation (ACT), Norfolk USA. As Director of Civil-Military Fusion Centre, she led the first NATO operational situational awareness experiment that later became an operational capability, supporting the comprehensive approach of the international community to the resolving of complex crises. She returned to the HQ SACT in 2013 as a National Liaison Representative.*

*In the summer of 2018, she assumed the position of Slovenian Defence, Military, Naval and Air Attaché in Washington D.C.*

*She has authored several military manuals. In 2013, she authored the SAF Military Education and Training Doctrine, and several articles on the role of women in the professional armed forces.*

### *Liliana Brožič and Mojca Pešec. Slovenian Armed Forces*

Slovenia has been a member of the Alliance since 2004. It has been participating in international operations and missions since 1997. In August last year, the share of women in the Slovenian Armed Forces amounted to 16.5%. In independent Slovenia, this has always been high share compared to other NATO countries, and has on the average ranked between 14% and 16%. Slovenian women have traditionally been active in the domain of security and, in particular, national defence. They made an important contribution during WWII and after the war, when Slovenia constituted one of the former Yugoslav republics.

Slovenia as a small country, which spreads on about 20,000 km<sup>2</sup>, with a population of about 2,000,000 and an armed force of 6,691 members is currently present in Kosovo, Iraq, Bosnia and Herzegovina, Afghanistan, Syria,

Lebanon, Macedonia, Serbia, Mali, Latvia and operation EU NAVFOR MED with 346 people per rotation, 242 of which are deployed in Kosovo.

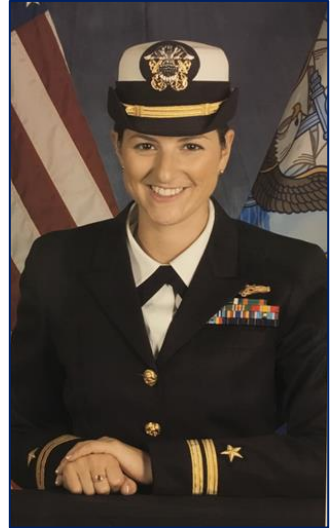
Compared to large countries, Slovenia represents a small sample, which is generally not comparable and interesting enough for scientific research on an international scale. However, it is, on the other hand, eminent enough to represent a case study for other comparable countries such as Lithuania, Latvia, Estonia, and others. Women in those countries have also played a very prominent role in the armed forces, both from the aspect of their cultural tradition and a sociological point of view.

In the Slovenian Armed Forces, we have been intensively monitoring the role of women from several different perspectives. In 2015, on the anniversary of UN Resolution 1325, we focused on their role in international operations and missions. For this purpose, we prepared a special questionnaire and attempted to find out how they themselves perceived their role, how their role was seen abroad by their male colleagues and how they as women in uniform were accepted by the international environment in different locations.

## 11) NATO Representative for Women Peace and Security

**Andrea N. Goldstein** is a commissioned officer in the US Navy Reserve and non-resident fellow at the Modern War Institute at West Point. As a reservist, she currently serves as a military gender advisor in NATO and focuses on gender as part of military strategy and operations. She has published widely, with bylines in *The New York Times*, *Task & Purpose*, *Proceedings*, *Fletcher Forum of World Affairs*, *War Horse*, *Business Insider*, and reports with the Center for a New American Security, Joint Special Operations University and *International Feminist Journal of Politics*.

Andrea is a Pat Tillman Scholar and holds a Master of Arts in Law and Diplomacy from the Fletcher School at Tufts University, and a bachelor's degree in History and Classics from the University of Chicago



## 12) The integration of women in to the Australian Army Infantry corps: Dimensions for success

*Dr Samantha Crompvoets, PhD, is a sociologist and consultant with over 20 years of experience in the design, implementation, analysis and reporting of strategic and applied academic research.*

*She has conducted extensive empirical research on a number of military cohorts, for both the Department of Veterans Affairs and the Department of Defence, including reservists, women, special forces, indigenous soldiers, and veterans. In addition, she has examined the intersections of lived experience and Defence policies, processes and culture across a number of corps and organisational units.*



*Samantha has also taught Qualitative Research Methods and a range of Sociology subjects at both undergraduate and postgraduate levels, and is director of research consulting firm, Rapid Context.*

*Dr. Samantha Crompvoets and BRIG Leigh Wilton, Army Headquarters, Russell, Canberra, Australia*

This paper overviews reflections and lessons learned against five dimensions for the successful integration of women in to the infantry corps:

1. Physical (including nutrition)
2. Professional
3. Environmental
4. Social
5. Cultural

Over the last two years, the Australian Army has integrated a number of women in to its Royal Australian Infantry corps, and arms corps more broadly. This paper describes some of the key challenges and highlights from this period and explores a number of key themes. Discussed against the five dimensions of success, noted above, are gender and physical fitness standards and gender and nutrition; and the importance of resilience, positivity and

determination by recruits. In addition, the significance of tailored mentorship and advice (both professional and personal); the criticality of timely and appropriate access to information and the importance of acceptance and preparedness of staff and peers to the presence of female recruits. Environmental aspects of integration – including physical (co)location – are also discussed.

This paper will also share insights from female soldiers as they traversed the historically male dominated domain of Infantry. Female infantry trainees viewed themselves as soldiers and platoon members primarily, not as women soldiers.

There are a number of cultural factors that are enablers or barriers to the successful integration of women in infantry. They relate to the tolerance of micro aggression (accepted as normal 'banter'), the importance of initiative and leadership at all levels, and education and standard operating procedures that incorporate the nuances of having females in a male dominated domain.



### **13) Infantry perceptions and potential mitigations of women joining the UK Infantry**

*Joanna is a chartered occupational psychologist with the British Psychological Society and a registered practitioner with the Health and Care Professions Council. She is the Principal Occupational Psychologist at the Army Personnel Research Capability (APRC), leading a team of 8 in the Directorate of Personnel Strategy, Army HQ and has worked there since 2012. She is the professional head for occupational psychology for the MOD, which provides the technical oversight and support for 20 to 25 occupational psychologists and some broader psychologist roles, across MOD. Her current role is wide ranging, covering advice, project work and evidence to support activities such as bespoke selections, integration of women in combat roles, career management, morale, retention, workplace behaviours, coaching and human factors investigation in Land fatalities. Her previous roles have been with the RAF Personnel and Training Command and with the Defence Evaluation and Research Agency, the precursor to dstl. Joanna's PhD is in organisational and traumatic stress in British Army personnel. She is a member of the British Red Cross PsychoSocial Support team which deploys with the Foreign Office overseas to support British nationals in crises.*



*Dr. Joanna Harvey, UK Army Personnel Research Capability, Army Headquarters*

All combat roles are now open to women in the UK Armed Forces. The infantry is the final Arms to open up, and potential recruits were able to apply in December 2018. Although there have been many women attached to infantry units in combat support roles on operations for many years (for example signallers, medics and engineers), this will be the first time they can be performing an infantry role. In order to enable their integration into infantry units and identify any mitigations which might be useful, a series of focus groups were conducted across four infantry units in Spring 2018. The focus groups were broken down into attached females, officers, senior non-

commissioned officers and junior soldiers. The findings and suggested mitigations will be discussed.

## 14) Women's Integration into Ground Combat Units: Understanding Differences in Experiences between Enlisted Women and Women Officers

*Antonieta Rico is a Fellow at Women in International Security where she works for the Combat Integration Initiative, supporting a gender perspective in military operations and organizations. Her research focuses on the integration of women into combat arms units in the US military. She most recently worked as the Director of Communications and Policy at the Service Women's Action Network (SWAN), the leading national organization advocating for*



*service women and women veterans. She served in the U.S. Army from 2001 to 2008, working as a military journalist and public affairs NCO. She has served in Iraq and embedded with various Army and infantry units during day-to-day missions and combat operations. She has worked as Deputy News Editor at Army Times and Navy Times, reporting on the Coast Guard, training cycles, gender integration and military quality of life issues. She has also interned at National Geographic Magazine, and has been published in TIME, USA Today, Task & Purpose, Connecting Vets and other outlets. She holds a Master of Science in Foreign Service, with a concentration in Global Politics and Security, from Georgetown University and a Bachelor of Arts in Communication from George Mason University.*

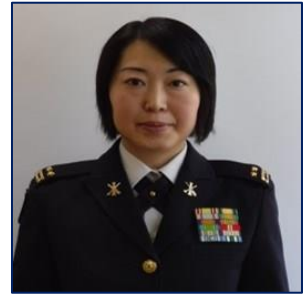
*Antonieta Rico, Women In International Security, Washington, DC.*

The U.S. military has generally approached gender integration of combat arms units as one-size-fits-all. However, research with the first cohorts of enlisted women and women officers in ground combat arms units reveals that the experience of enlisted women, especially lower enlisted, is very different from that of women officers. This paper compares the differences between the experiences of enlisted women and women officers integrating previously all-male ground combat units in the U.S. Army. It analyses interviews with female combat arms officers and compares it to a survey of enlisted combat arms women. The paper focuses on the training experiences of enlisted

women and officers, as well as their experiences at their first duty station and their thoughts on the impact of the U.S. military's Leaders First policy. Preliminary analysis shows that enlisted women face harassment (and even assault) at a level that women officers do not experience, while simultaneously having less access to the resources and the support networks necessary to cope with those experiences. This significantly impacts their ability to succeed at their job as they integrate combat arms units. The Leaders First policy, which places two female leaders in a unit at the company level before assigning junior enlisted women, has done little to address these problems. In order to ensure the success of women's integration into ground combat units, the military should recognize the impact rank has on the women integrating these units, and take these insights into account as they develop the policies, strategies and processes for further integration of additional ground combat units

## 15) Promoting active participation of women in Japan Ground Self Defense Force: Female Integration into Close Combat Units

*Lieutenant Colonel Junko ARAKI is an instructor of the Training, Evaluation, Research and Development Command in the Japan Ground Self Defense Force. She graduated from the National Defense Academy in 2004. She started her career at the 8th Air Defense Battalion. In 2012, she became a researcher at the International Peace Cooperation Activities Training Unit. She was served in*



*UNPKO as a staff officer/JMAC in the UNMISS HQs in 2014. In 2017 she earned a master's degree in Security from the Takushoku University, Tokyo.*

*LTC. Junko Araki, Japan Ground Self Defense Force*

Japan is facing big changes of social structure, such as aging society, declining birth rate and advancement of higher education. It may cause serious influence for shortage of human resources in Japan Ground Self Defense Force (JGSDF).

In Japan, there becoming a stream that those who suffer from a variety of circumstances become to be utilized more flexibly in the society. It is because that the facilitation of women's active roles has been positioned as an important element of the "third arrow" of Abenomics in Japan's Revitalization Strategy. Based on the stream and the strategy JGSDF adjusts to the society to maintain its strength by increasing women's participation.

In SAS Panel, I would like to share our policy and challenges for women's participation in JGSDF.

We formulated the "Initiative to Promote Active engagement of Female Self Defense Force (SDF) Personnel - Aiming for Attractive SDF that Adapts to the Times and Environment –" in April 2017 to specify its conceptual policy for promoting the active participation of female SDF personnel.

In April 2017 JGSDF opened almost all position for both men and women. Now the number of female JGSDF personnel is about 10,185 as of the end of March

2018. It is equivalent to about 7% of the whole JGSDF personnel. As a result, the proportion of female SDF personnel is increasing largely.

SDF is now trying to increase much more female personnel so that the proportion of female SDF personnel among total SDF personnel reaches over 9% by FY2027. Now JGSDF is trying to encourage more female to be involved in close combat units.

In this panel, I'd like to share our challenges and explain our policy for women's participation in JGSDF with some pictures of women who are actively involved in close combat units.

## 16) The UK Approach to Women in Ground Close Combat (WGCC)

**Warrant Officer Class 1 Gareth Bowen** joined the British Army in July 1999 aged 20. Serving a traditional Infantry career from Fusilier (rank of Private) up to the rank of Warrant Officer Class 2 as a Company Sergeant Major, WO1 Bowen was then promoted and posted in May 2018 to the role of WO1 WGCC at British Army Headquarters.

*The primary responsibility of this role is to facilitate the implementation of the WGCC program and to then assure the projects successful continuance.*

*WO1 Bowen also conducts briefings to units and organisations within the British Army to ensure the WGCC program is communicated, understood and disseminated correctly across all trades and personnel within the Army.*

*As the WGCC program is Tri Service (Navy, Army and Air force), WO1 Bowen also attends Tri service meetings and working groups to understand any lessons learnt and that best practice has been captured. WO1 Bowen is married to Lisa who is a Sgt in the Royal Army Physical Training Corps, they have a son Noah who is 4.*



*WO1 Bowen, Gareth, British Army*

The British Army has managed a staged approach to WGCC over two years. Initially opening up the Royal Armoured Corp in 2016 and then secondly the infantry at the end of 2018. This has been supported by a separate 5 year project that is looking at all physical training required for specific roles within the Army. This has helped support planning and preparation for the physiological management of a new physical training regime and test. The first role that was studied was Ground Close Combat and latterly leading to all other roles within the Army. Commander Field Army and his team have worked hard on the cultural and social message of the inclusion of women in to GCC roles. This has been done through a number of higher level briefings and unit level briefings.

## **17) RAF Regiment Training Wing**

*Sqn Ldr Giffin joined the Royal Air Force in 2007 after graduating from Loughborough University having studied French and German. Upon graduation from his basic Officer training he was assigned to 15 Sqn RAF Regiment where he commanded the mobility Flight in Iraq on Op TELIC in 2009. Giffin was subsequently posted to 1 Sqn RAF Regiment as OC Support Weapons. He was deployed numerous time into Libya in support of Op ELLAMY and was subsequently awarded the QCVS for his service. In 2012 deployed to Afghanistan in support of TF196 in a mentoring role to the Afghanistan Commando Police Force. Giffin continued his career as an OC TACP and JTAC serving with 16 Air Assault Brigade before assuming the role of Operations Officer with 2 Sqn RAF Regiment. His current role is with the RAF Regiment Training wing based at RAF Honington as the Deputy Chief of Staff where he has worked extensively with the programme of the integration of females into the RAF Regiment.*

In July 2017 it was announced that the RAF Regiment were to accept females into its ranks. The RAF was the first service within the MOD to have all of its branches and trades open to females. Sqn Ldr Giffin and FS Reeves will give a voice of experience in how the Regiment has adapted to the inclusion of Females.



## 18) The Queen Bees and the Women's Team -& A contextual examination of enmity and friendship between military women

After five years of military service in 1992, as a military infantry officer and platoon leader, **Mr. Frank Brundtland Steder** studied economics, social science, and econometrics. When he finished the Master's Degree in Economics from the University of Oslo in 1998 he started at FFI as a researcher within defense economics and long term defense planning. During his career at FFI, he has completed two other degrees, one in leadership (Command and Staff College) and one in Operational Research (Naval Postgraduate School).



Since 1999 Mr. Frank Brundtland Steder has been a project and program manager in a wide range of tasks and studies at FFI. He has been in charge of several interdisciplinary studies within defense economics such as benchmarking-studies (study director in NATO/RTO), cost-efficiency studies, Special Forces analysis, gender studies and other organizational development studies for the Norwegian Armed Forces (NorAF). Over the past few years, he has been a leading lecturer in the NorAF talking about gender, equality, leadership and diversity management.

Mr. Frank Brundtland Steder is a member of the NATO/STO/SAS-120 working group "Integration of Women into Ground Combat Units".

Major publications past five years (as editor for anthologies)

2013 *Militære kvinner –Forsvarets akilleshæl?*([Abstrakt forlag AS](#))

2015 *Military Women –The Achilles heel in Defence politics?*([AbstraktforlagAS](#))

2016 *Countering Hybrid Warfare: The Best use of SOF in a pre-article V scenario* ([CTX](#)).

*Nina Rones and Frank Brundtland Steder, A contextual examination of enmity and friendship between military women*

In several studies of women in the Norwegian Armed Forces, we have found an assertion that female groups are so riddled with conflicts and enmity that it is preferable to keep women few in number and mixed up with men, even in dormitories (Hellum 2014; Lilleaas and Ellingsen 2014; Rones 2015). Yet, when the Norwegian Special Operations Command (NORSOC) organized an all-female Special Reconnaissance Platoon, the NORSOC leadership would conclude that they had seen “almost disappointingly little of the conflicts that allegedly should occur in groups of females” (Rones and Steder 2017). Accordingly, this article will critically explore the assertion that women are often so quarrelsome that it is preferable to keep them few in number and mixed with men 24/7.

It will be argued that women’s alleged tendency towards enmity is a myth that is made ‘true’ by ‘queen bee behavior’. Queen bee behavior is seen as an act of recognition, whereby women comply with existing gender stereotypes, evaluate women negatively, but set themselves apart from the category of ‘women’ as someone who fits better with men, i.e. a performance of complicit masculinity. It is further argued that queen bee behavior is a response to the social-identity threat women experience when they enter a unit in which their gender has a low reputation and status, and where it is expected that a woman should fit seamlessly in as one of the guys, and accordingly have to make a symbolic ‘change of gender’.

*Frank Brundtland Steder and Nina Rones, The Queen Bees and the Women’s Team*

In 2014, the Norwegian Special Operations Commando (NORSOC) established a pilot project named Jegertroppen (The Hunter Troop) to recruit more women for operative military service. This unusual approach, integration of women by separating men and women during education, brought national and international attention, including admiration and wonder. This article explores why NORSOC segregated male and female operators, and assess the effectiveness of the segregated approach for recruiting, selecting, and retaining female operators.

## 19) Implications Of The Integration Of Women in Ground Close Combat Units for UNSCR 1325, and the Women, Peace and Security Agenda

*Maj Héloïse Goodley* commissioned into the Army in 2007 having worked for the previous five years in London as a management consultant. In her Army career she has deployed twice to Afghanistan, serving with the British Forces and the United States Marine Corps, and also deployed in support of the NATO mission in Libya. Most recently she has returned from working in the United Nations peacekeeping mission in the Democratic Republic of Congo.



*Héloïse is also a part-time PhD student at King's College London, and author of the book 'An Officer and a Gentlewoman', which chronicles her experiences of joining the Army and undergoing training at the Royal Military Academy Sandhurst. Héloïse currently holds the rank of major and serves as the Chief of General Staff's Visiting Fellow at Chatham House*

*Maj Héloïse Goodley*

What are the implications for women in ground close combat for changing the nature of operations? How might women in ground close combat roles affect the masculine environment of combat, and what might this mean for operations, especially humanitarian response and the women peace and security agenda.

## 20) Challenges of Integration of Women in Peacekeeping Operations

*Dr (Mrs) Shilpi Nanglu Bharati, Scientist 'D' has put in 12 years and 7 Months of service in DRDO. She has worked in the areas of personality assessment and development of intelligence tests. She is trainer to the armed forces officers on personality assessment at DIPR. She is a visiting faculty at Center for United Nations Peacekeeping (CUNPK), this faculty pool is duly selected and approved by Vice Chief of Army Staff. She has been delivering lectures on 'Culture sensitivity' since March 2015 in various international and national UN peacekeeping pre-deployment training courses conducted by CUNPK for officers and other ranks.*



*She was Indian technical lead in the international collaborative project with Dstl, UK on the project, "Cultural Adaptation of troops in extraterritorial military operations" which yielded tangible deliverables accepted by the Indian Army. These were cultural database booklets of countries Democratic Republic of Congo, South Sudan, Lebanon and Israel for UN peacekeepers are being used in the pre-deployment training of troops on UN missions. Second, Culture sensitivity training module. Currently, working as the Indian technical lead of the international collaborative study with Dstl, UK on "Integration of women and gender issues on extraterritorial Military operations".*

*Dr. Shilpi Nanglu, Scientist 'D', Defence Institute of Psychological Research, DRDO, Ministry of Defence, India*

Integration of women in peacekeeping operations is imperative for inspiring new solutions and solving conflicts. Men, women, boys and girls are affected differently by armed conflict which calls for a gendered approach to peacekeeping to adequately respond to their needs, therefore, UN has also shifted to a gendered approach in peacekeeping by passing the first Resolution 1325 in the year 2000. Many subsequent Resolutions have been passed since then so that the peacekeeping mission may not overlook vital issues of gender inclusive security essential for establishing sustainable peace and efforts are being made to impart an exclusive pre-deployment training to women officers.

The current study aims to explore the challenges faced by deployed women peacekeepers which impact their effective integration into the peacekeeping operations and to propose strategies to deal with them. The data was collected from 13 women military officers from different countries who were undergoing pre-deployment training: female military officer course at CUNPK, Delhi wherein aspects related to female deployment on UN missions were covered. The women officers with deployment experience were taken for the study. A semi-structured interview was used for data collection. The data was analysed using qualitative content analysis method.

The major themes that emerged from the analysis highlight the main challenges faced by the women peacekeepers that include family responsibilities, motherhood, cultural sensitivity, sexual exploitation and abuse, gender role as determinant of success and occupational tasks. The study suggests the strategies to counter the challenges faced by women peacekeepers which include: acceptance of incongruent gender roles, building cultural intelligence of the peacekeepers, taking a proactive stance against sexual harassment and bullying, facilitating social support to the family members of the deployed women and optimized utilization of the women peacekeepers.

## 21) UK-India Human Sciences Collaboration: Gender differences in the military from two different cultures

*Amy Murphy is a Principal Psychologist at the Defence Science and Technology Laboratory, which is part of the UK Ministry of Defence. Amy's with research interests are primarily within gender studies and cultural psychology, socio-cultural psychology in the cyber domain as well as group processes and intergroup relations. Postgraduate studies include an MSc in Social and Applied Psychology and a PhD in Social Psychology, focusing on Sexism and Gender Studies, from the University of Kent, UK. For the past 6 years at Dstl, Amy has lead on projects including Cross-Cultural Adaptation, as well as applying social psychological theories to cultural issues, in both online and offline research.*



*Dr, Amy Murphy, Senior Psychologist, Defence Science and Technology Laboratory, UK*

This research is presented to outline the cross-cultural collaborative work between the Defence Science and Technology Laboratory (Dstl) in the United Kingdom (UK) and the Defence Institute of Psychological Research (DIPR) in India. Built on a previous Cultural Adaptation Collaboration Project (CACP), the aim of the three year UK-India Human Sciences Collaboration (UK-I HSC) project is to enhance the understanding of gender differences on extra-territorial military operations, in the peacekeeping environment for DIPR and in mission roles in general for Dstl.

Dstl and DIPR are collaboratively developing methodologies in order to cover four main topic areas:

1. Scoping the landscape of women in mission roles research: Cross-cultural literature reviews are used to understand the landscape in terms of existing research and work relating to gender differences for mission roles on extra-territorial operations, and on peacekeeping operations.

2. Identification of key benefits and issues affecting women's deployment on extra-territorial operations: Data from samples of Indian and UK women and men will identify the key issues and any gender based barriers for women deployed in mission roles on extra-territorial operations. Comparative thematic analysis will be drawn upon to inform subsequent research.
3. Women in leadership roles: Women and men in the military will be 'profiled' in order to understand the main barriers, benefits and challenges of in relation to women in leadership roles.

Identification of methods to address gendered challenges: Evidence-based recommendations will be provided to suggest how gender mainstreaming can be integrated. Further recommendations to address gendered challenges in mission roles in general as well as on extra-territorial operations will be offered.

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## 22) Recruit experiences of the re-introduction of mixed gender basic training for non-infantry

**Mark Watton** heads the two-man team providing behavioural science support to the British Army recruitment and selection unit for both Soldiers and Officers. A core aspect of this work is managing the tri-service annual recruit survey; additional and current focus is developing a programme of research to be delivered in partnership with Defence science units and academics with an interest in selection, retention and training.



Having completed his MSc in Occupational Psychology at Goldsmiths, University of London in 2007 he is a Chartered Member of the British Psychology Society. He worked for psychometric test publishers before joining the UK Ministry of Defence in 2009. His work within the MOD has spanned training, leadership development, cultural diagnostics, large scale attitude surveys, team evaluation and development, and more latterly selection.”

*Mr. Mark Watton, Occupational Psychologist, British Army Recruitment and initial Training Command*

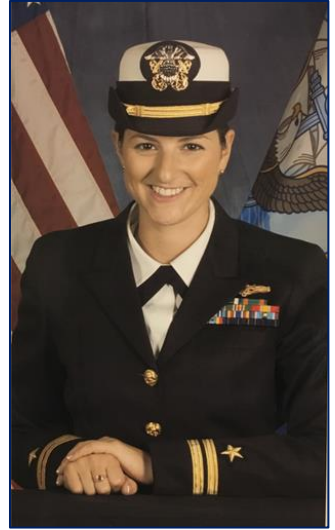
Qualitative and quantitative data has been collected as part of the internal review of the recently re-established mixed gender training at non-infantry basic training establishments. The Army Recruitment and Initial Training Command, owner of the British Army basic training, has been careful to graduate roll out of the mixed gender basic training, given previous evidence of excessive incidents of muscular skeletal injuries in female recruits. This has allowed closer monitoring of the impact of the new training regime on attitudes towards training and levels of satisfaction from both male and female recruits. This presentation will provide a brief on the historical risks which separated training, how the organisation has responded to these risks, the considerations made, the behavioural consequences and the experiences of recruits joining the mixed gender training platoons.



## 23) Understanding resistance to women in combat jobs

**Andrea N. Goldstein** is a commissioned officer in the US Navy Reserve and non-resident fellow at the Modern War Institute at West Point. As a reservist, she currently serves as a military gender advisor in NATO and focuses on gender as part of military strategy and operations. She has published widely, with bylines in *The New York Times*, *Task & Purpose*, *Proceedings*, *Fletcher Forum of World Affairs*, *War Horse*, *Business Insider*, and reports with the Center for a New American Security, *Joint Special Operations University* and *International Feminist Journal of Politics*.

Andrea is a Pat Tillman Scholar and holds a Master of Arts in Law and Diplomacy from the Fletcher School at Tufts University, and a bachelor's degree in History and Classics from the University of Chicago



LT Andrea N. Goldstein, The Fletcher School of Law and Diplomacy, Tufts University, Medford, MA, USA.

This article argues that opposition to expansion of women's roles in the US military and peer armed forces, particularly into combat-related military occupational specialties, is based on defending a means of proving masculinity and preserving access to power. Research is based on policies of US, UK, and other NATO countries, public statements made by officials, academic articles, and interviews with current and former members of the US military. The article examines shifting definitions of combat, historical examples of American women's military service, and common and persistent themes of resistance to women in combat roles. The article argues that resistance to women in combat roles is not only inconsistent with operational realities, but is both counterproductive to mission effectiveness, and may even put lives at risk. The article concludes that in an ever-shifting security environment requiring critical thinking, cross-cultural communication, and civil-military collaboration, rethinking gender roles may be advantageous

24) Maj Jen O'Connor (GBR)

## 24) The Experiences of Female Officer Cadets at the Royal Military Academy Sandhurst

*Major Jen O'Connor* commissioned into the Royal Engineers in 2007 having completed the Regular Commissioning Course at RMAS. She began her career as an Armoured Troop Commander, supporting both armoured and light role battlegroups in the UK and overseas. She undertook diverse roles early in her career within the Royal Engineers executing construction, amphibious and light role engineering tasks in the UK, Germany, Cyprus and Kenya.



Upon deployment to Afghanistan in 2011 she was the infrastructure plans officer for Task Force Helmand, the UK contingent's Brigade Headquarters, where she led the planning for the base realignment and handover of UK occupied infrastructure. Upon return from Afghanistan she commanded an Air Support Squadron as a Captain.

She has undertaken staff roles in Defence Engagement at 8 Engineer Brigade and beyond Staff College she has served as an instructor in planning and tactics at the Junior Staff Centre. Her current role at the RMAS sees her engaged across the spectrum of training with a particular focus upon military planning as well as diversity and inclusion.

Major O'Connor is married to Charles, a Royal Air Force Officer, and they are expecting their first child in June.

*Maj Jen O'Connor. Royal Military Academy Sandhurst, UK*

In February 2018, Commander Royal Military Academy Sandhurst, commissioned research into a perceived unconscious bias by staff against female Officer Cadets. A round of interviews were conducted with recently commissioned female Young Officers to ask them about their experience at RMAS as women.

The report concluded that there was evidence of some sexist behaviour amongst individuals but that it was not an inherently sexist environment. There were predominantly errors in staff judgement and execution of policy that made some women feel excluded from the main body of the Regular Commissioning Course. Many of the complaints raised by the female Officer Cadets, rather than being categorised as sexist, were more akin to poor behaviours borne from poor leadership. The overriding conclusion was that greater investment in leadership training and education for the staff in order to set a better example, as well as practical instruction on specifics relating to women was needed. A second round of interviews has been conducted with Officer Cadets commissioned in Aug 18 as well as interviews with female staff and cadets at RAF Cranwell and Britannia Royal Naval College. Within the Academy, the Commander has executed the Sandhurst Heritage Project, which amongst other things aims to improve the semiotics of the Academy to better reflect female accomplishment in the Army over the past 100 years. Until last week, the only portraits of women in the Academy were the Queen and the Duchess of Cornwall. The second report is due for release in Nov 18.

## 25) Socio-Cultural Change in Gender and Military Context: measuring values

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Women have been pursuing careers within the combat arms in the Canadian military since 1989, and today comprise 4.8 percent of combat arms officers and 4.1 percent of combat non-commissioned soldiers. In the wake of widespread assumptions regarding the achievement of gender integration by

1999, along with the demonstrated contributions of women to Canada's operations in Afghanistan, limited research has been conducted to determine the extent to which espoused socio-cultural change has been achieved, and in particular within the combat arms. However, in response to a recent external review on sexual harassment and sexual misconduct, coupled with calls for increasing the participation of women in international operations, the Chief of the Defence Staff has placed high priority on socio-cultural change. Canada's most recent Defence Policy, *Strong Secure Engaged*, reinforces this priority, including the imperative of mitigating harmful and inappropriate behaviours, integrating gender-based analysis into defence policy and planning, and integrating gender perspectives into military operations. While numerous institutional initiatives have been established to achieve these objectives, the measurement and monitoring of culture and culture change is a persistent challenge. This paper provides an overview of culture change initiatives within the Department of National Defence and the Canadian Armed Forces, followed by discussion of measures and methodologies for measuring, monitoring and assessing socio-cultural change objectives, including support for shifting cultural narratives and inclusions, such as the integration of gender perspectives into operations, increasing the representation of women, or the introduction of women into previously all-male roles. Finally, the paper presents the results of a values study recently conducted in the Canadian Army, thus highlighting important considerations for understanding culture change, including readiness of personnel to adapt to social change. The discussion concludes with observations regarding the relevance and importance of the measurement and monitoring of values as a key dimension of assessing readiness for, and progress toward, socio-cultural change in military context, including the participation of women in combat roles.

## 26) Architecting a Paradigm Shift to Further Invest in Human Capital

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LTC Kristina Richardson (U.S. Army)

Common themes and discussion points consistently emerge in the dialogue on gender integration. This includes beliefs about women that are not always based on facts, but instead are misconceptions (i.e. pregnancy, sexual harassment/assault, physiological characteristics, etc.). This is prevalent not only in the military but also in the civilian sector, and can lead to cultural, behavioral, and group dynamic changes in the organization. Such misconceptions and generalizations can have a negative impact on women who currently reside in an organization and/or for the introduction of women into a previously male only organization. Additionally, the idea of equal opportunity for underrepresented populations can lead to concerns about lowering requirements/standards and not hiring the best capable and most qualified candidates because often leadership feels compelled and/or pressured to rush the process and meet quotas/goals from higher. This means that job requirements and standards (i.e. knowledge, skills, abilities, and attributes) must be clearly established, and then the assessment and selection

criteria must be clearly aligned with the job requirements, and be gender neutral. Finally, the idea of reaching a critical mass is not always a realistic goal in certain organizations that simply do not have a large population of interested women to pull from, and then to further search for fully qualified and capable women inside the already small interested population does not happen immediately, but takes time and patience.

The U.S. Military has taken several steps towards opening previously closed positions and organizations to women. However, in many instances, women have been creatively attached and/or working directly in ground combat units for quite some time. Women have been assigned to U.S. Army Special Operations Command (USASOC), attached to combat units in direct operational roles, and serving as members of Civil Affairs (CA) and Psychological Operations (PSYOPS) career fields for over 20 years. In 2013, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff initiated the Women in Service Review (WISR) Implementation Plan directing each Military Service and U.S. Special Operations Command (USSOCOM) to develop plans to integrate women into previously closed units and positions. Subsequently, USASOC examined all special operations jobs and assessed how to further integrate women into Army Special Operations Forces (ARSOF). Furthermore, the Office of Personnel Management (OPM) conducted a job analysis for USASOC to determine the knowledge, skills, abilities, and attributes essential to effective performance for the Special Forces and Ranger Regiment Soldier. USASOC validated all assessment and selection programs that were closed to females, with a focus on ensuring that the tasks and standards were operationally relevant, current, and gender neutral. USASOC's policy continues to be - to accept all qualified applicants while selecting the "best and most qualified" candidate, regardless of gender. USASOC additionally participated in and conducted several studies with third party research and academic organizations (i.e. RAND, OPM, Kansas University, JSOU, NPS, etc.) to better understand integrating Architecting a Paradigm Shift to Further Invest in Human Capital women into the organization, and developed a deliberate integration process beginning with select senior leader positions. None of the research or studies provided a defensible argument to request an exception to policy to keep the current closed occupations and positions closed. The studies did not predict that the integration of females into ARSOF would lead to a decrease in mission success or readiness. None of the studies identified insurmountable concerns to the integration of females in previously

closed occupations and positions, but they did indicate that implementation would be complex due to U.S. Army guidance and maintaining team cohesion. Studies indicated that the opposition over integration would decline over time. There were several leadership challenges identified in the studies and most of the concerns required action at all levels. Lastly, the studies recommended consideration of the specific unit of assignment and the cultural norms of the area of operation to ensure the highest level of effectiveness for the individual and unit.