

Contents of Previous Issues of the *Journal of Battlefield Technology*

1998

Volume 1 No 1 March 1998

Firepower

Some Metallurgical Aspects of Shaped Charge Liners	<i>A. Doig</i>	1
Penetration Performance of Segmented Rods - Comparison With Continuous Rods at High Velocity <i>S. Abdullah, J. Hetherington & D. Leeming</i>	4
Damage to Ceramic Armours Subjected to High Velocity Impact by Steel Sphere <i>P. Hazell & M. Iremonger</i>	9

Mobility

Crew Cooling in Armoured Vehicles	<i>J. Bridger</i>	13
---	-------------------	----

Command Systems

Evolutionary Acquisition of Battlefield Command Systems	<i>D. Henderson</i>	17
Using COTS Technology in C2 Information Systems: Balancing the Benefits and Risks	<i>I. Macleod</i>	23
A Hybrid Civilian/Military Payload to Support Battlefield Communications	<i>T. Mahoney</i>	29

Surveillance and Target Acquisition

The Role of Surveillance and Target Acquisition in Guided Weapons	<i>J. Rouse</i>	33
Battlefield Surveillance Radar	<i>R. Picton</i>	36

Volume 1 No 2 July 1998

Firepower

Analysis of the Forces Acting on a Shoulder Supported Weapon During Firing	<i>A. Dica & D. Allsop</i>	1
Main Battle Tank Stabilisation Ratio Enhancement Using Hull Rate Feedforward	<i>D. Purdy</i>	5
Comparison of the External Expansion of a Pressurised Thick-walled Cylinder With Predictions From a Finite Element Model	<i>A. Hameed, R. Brown & J. Hetherington</i>	10

Mobility

Electric Drive Technology for Tracked Vehicles	<i>H. Naunheimer</i>	15
--	----------------------	----

Command Systems

The Implementation of GIS in Defence Systems	<i>D. Swann</i>	19
Bandwidth Adaptability for Deployable Headquarters	<i>B. McLure & I. Macleod</i>	23
Towards Establishing the Information Requirement in the Battlegroup	<i>M. Lloyd</i>	28

Management

Defence Applications of System Dynamics Models	<i>J. Kearney</i>	33
--	-------------------	----

Volume 1 No 3 November 1998

Firepower

Long Rod Penetrator Performance	<i>M. Bennett</i>	1
---------------------------------------	-------------------	---

Mobility

A Review of Transmission Systems for Tracked Military Vehicles	<i>S. McGuigan & P. Moss</i>	7
--	----------------------------------	---

Command Systems

Architectronics - The Study of (Defence and CIS) Systems Architecture.....	<i>D. Hitchins</i>	15
Development of Antenna Training Aids Using Electromagnetic Visualisation and Other Techniques <i>A. Nott</i>	31

1999

Volume 2 No 1 March 1999

Firepower

Ceramic Armour	<i>P. Hazell</i>	1
----------------------	------------------	---

Mobility

The Implications of Deep Wading on the Design and Operation of Armoured Vehicles	<i>P. Barton</i>	6
--	------------------	---

Command Systems

Message Text Formats - A Solution to the Problem of Interoperability.....	<i>W. Peach</i>	11
---	-----------------	----

The Roles of Artificial Intelligence in Battlefield Command Systems	<i>M. Ryan</i>	17
---	----------------	----

Nutrition

Nutrition for Military Fitness	<i>C. Forbes-Ewan</i>	21
--------------------------------------	-----------------------	----

Volume 2 No 2 July 1999

Firepower

A Trajectory Prediction For Segmented Projectiles Using CFD Code	<i>J. Szmelter and S. Abdullah</i>	1
--	------------------------------------	---

Command Systems

Error-induced Performance Problems On ATM-based Satellite Tactical Trunks	<i>D. Wilksch</i>	10
---	-------------------	----

The Electronic Warfare Operational Support Centre (EWSOC) Database - A User Perspective ..	<i>C. Howe</i>	15
--	----------------	----

Surveillance and Target Acquisition

Overcoming the Limitations of Imaging in Hot Climates	<i>B. Craig</i>	19
---	-----------------	----

Management

Systems Thinking and Systems Dynamics Modelling—Aids to Decision Making	<i>A. McLucas</i>	24
---	-------------------	----

Volume 2 No 3 November 1999

Firepower

On the Stabilisation of Out-of-balance Guns	<i>D. Purdy</i>	1
---	-----------------	---

Command Systems

A Methodology for Analysis of Australia's Future Soldier ..	<i>W. Hobbs, G. Chalmers, D. Sivan & P. Davis</i>	8
---	---	---

Exploiting CORBA in a Military Tactical Environment	<i>T. Au, W. Blair & R. Jana</i>	13
---	--------------------------------------	----

The Management of Distributed Databases in Military Command Support Systems	<i>D. Wilton</i>	17
---	------------------	----

Surveillance and Target Acquisition

HF Surface-wave Radar and its Role in Littoral Warfare	<i>S. Anderson, B. Bates & M. Tyler</i>	23
--	---	----

2000

Volume 3 No 1 March 2000

Firepower

- Warhead Hit Distribution on Main Battle Tanks in the Gulf War *M. Held* 1
Armament Electrical Explosive Hazard Testing in Australia *A. Nott* 10

Command Systems

- Command and Control within the Land Component..... *J. Storr* 18
Command and Automation – A Risky Dualism? *M. Mills* 29

Surveillance and Target Acquisition

- Synthetic Aperture Radar *R. Picton* 33

Training and Analysis

- Simulation-based Training – Beneath the Shroud..... *M. Darby* 42

Volume 3 No 2 July 2000

Firepower

- Modelling of the Vulnerability of Tanks and Other Protection Systems 1
..... *S. Nugent, W. Pexa, B. Geringer, A. Vogel, G. Korlath & H. Horvath*
Use of a Time-dependent Brinell Hardness Test to Determine Some Mechanical Properties of Solid
Propellants *B. Plihal & L. Jedlicka* 7

Command Systems

- (Still) Striving for Utopia *M. Mills* 13

Training and Analysis

- Training Resource Optimisation – The Processes of Managing Change *M. Darby* 17

Management

- A Systems Engineering Framework *I. Faulconbridge* 25
A Systems Approach to Defence Procurement *D. Hitchins, A. Jaber & M. Moulding* 29

Volume 3 No 3 November 2000

Firepower

- Muzzle Flow Field Studies *A. Crowley* 1
A Comparison of the Performance of Various Light Armour Piercing Ammunition 5
..... *I. Horsfall, N. Ehsan & W. Bishop*

Command Systems

- The Interchange of Information and the Role of the Command and Fire Control Systems in the
Composite Reconnaissance System *F. Benz* 9
Software Engineering or Evolution? The Battle for an Army Command Support System *P. Lambert* 17

Surveillance and Target Acquisition

- Co-ordination of Images from Multiple Sensors into a Common Data Space *V. Polito & I. Luckraft* 23
Modelling the Signature Vulnerability of a Main Battle Tank *S. King & M. Richardson* 29

Training and Analysis

- Battlefield Simulation—Building Virtual Environments *M. Darby* 35

Management

- Rectifying Failure to Learn in Complex Environments *A. McLucas* 42

History

- Length Isn't Everything—Use of the Macedonian Sarissa in the Time of Alexander the Great 51
..... *R. Dickinson*

2001

Volume 4 No 1 March 2001

Firepower

- The Effect of Shock Waves Caused by a Penetrating Projectile on Simulated Blood Vessel Systems *J. Komenda, D. Rozehnal, L. Juricek & L. Jedlicka* 1
- Weapon Scoring Using a Multilayer Perception Network *N. Nor & K. Wand* 7

Mobility

- Protection of Vehicles Against Landmines *R. Bird* 14

Command Systems

- The Relationship Between IT Strategic Planning and Enterprise Architectural Practice *D. Wilton* 18
- Digitisation of the Battlespace (Land) and the Principles of War *J. Widdowson* 23
- An Investigation of Hand-held Pen-based Computing for Combat Soldiers *W. Hobbs & K. Mouzakis* 28
- Towards Better Knowledge: A Fusion of Information, Technology, and Human Aspects of Command and Control *V. Kallmeier, S. Henderson, B. McGuinness, P. Tuson, R. Harper, S. Price & J. Storr* 34

Surveillance and Target Acquisition

- Exploring the Value of Sensors to a Reece Unit Using Agent-based Models *M. Lauren & D. Baigent* 44

Volume 4 No 2 July 2001

Firepower

- The Computational Study of the Aerodynamic Design of a Segmented Rod Projectile *J. Szmelter & S. Abdullah* 1

Mobility

- Preliminary Insight into Aerodynamics of Flapping Wing Micro Air Vehicles (MAV) for Indoor Reconnaissance *J. Szmelter & R. Zbikowski* 5

Command Systems

- Under Command, Out of Control—The Emerging Paradigm for Army Operations *J. Widdowson* 9
- A Common Approach to Switching in Tactical Trunk Communications Systems *B. Blair & S. Egan* 17
- Use of COM+ and .NET for Building Distributed Systems *J. Hildebrandt* 22
- Information Operations—What is IO? *A. Brosnan* 32

Surveillance and Target Acquisition

- System Integration and Flight Testing of a Laser Designation Pod and Laser-guided Bombs on the Italian Tornado Interdiction Strike Aircraft *R. Sabatini & M. Richardson* 37

History

- An Evaluation of the Effectiveness of Three Methods of Spear Grip Used in Antiquity *P. Connolly, D. Sim & C. Watson* 49

Volume 4 No 3 November 2001

Firepower

- Liners for Shaped Charges *M. Held* 1

Mobility

- Protection of Lower Limbs against Floor Impact in Army Vehicles Experiencing Landmine Explosion *J. Wang, R. Bird, B. Swinton & A. Krstic* 8

Command Systems

- Is Warfare an Art or a Science? Implications for Command and Control Information Technology *A. Dekker* 13
- Information Operations—How Meaningful is IO Doctrine? *A. Brosnan* 19
- Supporting the Army Capability Development Process Using Agent-based Distillations—A Case Study ... *A. Gill, R. Egudo, P. Dortmans & D. Grieger* 25

Surveillance and Target Acquisition

- Options for the Defeat of Solar Blind Ultra Violet Wavelength Missile Warning Sensors *J. Foster & M. Richardson* 31

Management

- Choice and Decision-making in Engineering and Architecting of Complex Systems *A. McLucas* 37

2002

Volume 5 No 1 March 2002

Firepower

- Measuring Technique for the Determination of the Velocity and Spatial Distribution of Shotgun Pellets and Explosively Driven Fragments *M. Held* 1
AMOS (Advanced MOrtar System)..... *K. Reunamaki* 9

Command Systems

- Personnel Electromagnetic Radiation Hazards: An Introduction and Manpack Radio Issues *A. Nott* 15

Training and Analysis

- Map-aware Non-uniform Automata (MANA)—A New Zealand Approach to Scenario Modelling *M. Lauren & R. Stephen* 27

Management

- A Description of the Strategy to Task Technique and Example Applications *M. Bathe & J. Smith* 32
Dynamic Modelling to Aid Management of Military Capability *A. McLucas* 37

Book Review

- Review of Wesley K. Clark: “Waging War” *M. Frater* 47

Volume 5 No 2 July 2002

Firepower

- Experimental Observations of the Perforation of Glass by the 7.62-mm NATO Ball Round *P. Hazell & S. Armstrong* 1
Technology Insertion to Develop Mortar Systems for the Modern Battlefield *J. Pape* 6

Command Systems

- ‘Who Knows, Wins’—Knowledge Management and Emerging Army Tactical Command and Control Concepts *W. Blair* 13
Be Careful What You Wish For: The Dangers of Fighting With a Network Centric Military ... *A. Kaufman* 20

Surveillance and Target Acquisition

- Electro-optic Systems Analysis *M. Richardson* 24

Management

- Using the Strategy to Task Technique to Prioritise Technology Options . *J. Smith, P. Haysman & S. Szalay* 28

Book Review

- A Review of Edward Luttwak: “Strategy: The Logic of War and Peace” *D. Goyne* 33

Volume 5 No 3 November 2002

Firepower and Protection

- Numerical Simulations of an Explosive Reactive Armour Rear Plate Impacting a Lightweight Armoured Vehicle’s Hull *P. Hazell* 1

Command Systems

- When Can Battlefield Command Support Systems Within Headquarters Go Wireless? *P. Arcus* 5
Networking in an Uncertain World *A. Kaufman* 11
Secure Messaging in Coalition Operations *N. Parker, M. Henderson & C. Moore* 15

Surveillance and Target Acquisition

- Electro-optic Systems Analysis—Part 2 *M. Richardson* 21

Management

- The Status of Models in Systems Engineering *S. Price & P. John* 25

Book Review

- A Review of “The Mind of War: John Boyd and American Security” *D. Goyne* 31

2003

Volume 6 No 1 March 2003

Firepower and Protection

- Numerical Simulations and Experimental Observations of the 5.56-mm L2A2 Bullet Perforating Steel Targets of Two Hardness Values *P. Hazell* 1
- Experimental and Computational Research for Conceptual Design of Mine-resistant Boots *J. Wang, R. Bird, R. Swinton & A. Krstic* 5
- Ballistic Properties of Depleted Uranium and Biological Consequences *W. Andrews, E. Ough, B. Lewis & L. Bennett* 11

Command Systems

- Transforming Data into Actionable Knowledge in Network Centric Warfare *Y. Yufik* 17

Training and Analysis

- Using Agent Based Distillations to Model Civil Violence Management *S. Yiu, A. Gill & P. Shi* 27
- Management
- Training to Improve Decision Making: Systems Dynamics Applied to Higher-level Military Operations *B. Bakken & M. Gilljam* 33

Book Review

- A Review of "EW 101: A First Course in Electronic Warfare" *M. Ryan* 43

Volume 6 No 2 July 2003

Firepower and Protection

- Threats to Military Transport Aircraft: A Technical Review *M. Held* 1
- A Method for Predicting Natural Fragmentation of Warheads *J. Szmelter & J-S. Yeo* 11

Vehicles and Mobility

- Handling of High-speed Tracked Vehicles *D. Purdy & P. Wormell* 17

Command Systems

- Centralisation and Decentralisation in Network Centric Warfare *A. Dekker* 23
- Aspects of Trans-horizon High-frequency Communications with Helicopters *A. Nott* 29

Training and Analysis

- Linking Individual Skills to Collective Outcomes: An Agent-based Distillation Study *P. Dexter & R. Nicholson* 41

Book Review

- A Review of "Transforming America's Military" *M. Ryan* 45

Volume 6 No 3 November 2003

Firepower and Protection

- The Effect of Ceramic Type on the Performance of Ceramic-faced Metallic Armour *I. Horsfall, W. Bishop & D. Cowan* 1
- A Review of Methods for Predicting Bomb Blast Effects on Buildings *A. Remennikov* 5

Vehicles and Mobility

- The Use of Electric and Hybrid-electric Drives in Military Combat Vehicles *R. Colyer* 11

Command Systems

- Potential Shortcomings of Selected MAC Protocols for Wireless Ad Hoc Networks *W. Blair* 17
- Implication of Anomalous Propagation in the Evaporation Duct for Radars at X and Ku Band *A. Kerans, A. Kulesa, G. Woods & J. Hermann* 25

Training and Analysis

- Operational Aspects of Imaging Radar Systems in Maritime Reconnaissance Aircraft *D. Galligan & M. Lauren* 29
- Combat Entropy as a Measure of Effectiveness *P. Dexter* 33

Book Review

- Review of "Strategy for Chaos: Revolutions in Military Affairs and the Evidence of History" .. *D. Goyne* 40

2004

Volume 7 No 1 March 2004

Firepower and Protection

- A Tutorial on the Penetration of Kinetic Energy (KE) Rounds *M. Held* 1
Ballistic Damage in Carbon/Epoxy Composite Panels *J. Wang & R. Bartholomeusz* 7

Vehicles and Mobility

- A Brief Investigation into the Effect on Suspension Motions of High Unsprung Mass 15
..... *D. Purdy & D. Simner*
Handling of Tracked Vehicles at Low Speed *P. Wormell & D. Purdy* 21

Command Systems

- Command Modelling Languages and the Reduction of Display Fixation 27
..... *G. Hone, R. Ayres & L. Martin*

Training and Analysis

- Demonstrating the Benefits of Simulation in a Military Environment *D. Wilton* 31
An Immersive Approach to Command and Control *J. Knutzon, B. Walter, A. Sannier & J. Oliver* 37

Book Review

- A Review of "Ceramic Armor Materials by Design" *P. Hazell* 43

Volume 7 No 2 July 2004

Firepower and Protection

- Evaluating Numerical Approaches in Explosion Modelling Using A Surface-laid Mine 1
..... *D. Fiserova, A. Hameed, T. Rose, J. Hetherington & S. Prochazka*

Vehicles and Mobility

- Scale-model Testing of Soil-vehicle Systems *J. Hetherington* 7

Command Systems

- Organizational Structure—The Unexpected Force *C. Kirke* 11

Training and Analysis

- Improvement to the Movement Algorithm in the MANA Agent-based Distillation *A. Gill* 19
Multi-agent Simulation for Assessing Massive Sensor Deployment *S. Hynes & N. Rowe* 23

Surveillance and Target Acquisition

- Laser Analysis—Part 1 *B. Kellaway & M. Richardson* 27
Modelling the Performance of an Airborne Forward-looking Infrared System in the Australian
Environment *K. Benke* 31

Volume 7 No 3 November 2004

Firepower and Protection

- Blast Loading and Clearing on Tall Buildings *T. Rose, P. Smith & T. McLennan* 1
Design Trends in the Development of Large-Calibre Kinetic-Energy Rounds 9
..... *A. Hameed, J. Hetherington & R. Brown*

Vehicles and Mobility

- The Potential of Smart Processing Systems in the Battlefield 17
..... *J. Economou, A. Tsourdos, P. Luk & B. White*

Command Systems

- Automatic Speaker Identification in C2 Centres: Challenges and Pitfalls *P. Chatelain* 21

Surveillance and Target Acquisition

- Laser Analysis—Part 2 *B. Kellaway & M. Richardson* 25
Unattended Ground Sensor Network For Force Protection *P. Kikiras & J. Avaritsiotis* 29

Training and Analysis

- The MANA Model: A Tool for Modelling Network Centric Warfare *D. Galligan* 35

Book Review

- A Review of "Curbing Innovation: How Command Technology Limits Network Centric Warfare" 41
..... *M. Hoyler*

2005

Volume 8 No 1 March 2005

Firepower and Protection

Simulation of Plate Structure Subjected to Anti-tank Mine Blast	1
..... A. Showichen, A. Hameed, M. Iremonger & J. Hetherington	
Synthesis of the Lever Arm in a Gun Positioning System	9
..... N. Prasad, T. Ganesan, P. Venkatesan & S. Ramesh	

Command Systems

The Science of Command and Control (C2)	D. Cropley, N. Sproles, & S. Cook	15
C4ISR, The FINC Methodology, and Operations in Urban Terrain	A. Dekker	25

Surveillance and Target Acquisition

Laser Analysis—Part 3	B. Kellaway & M. Richardson	29
-----------------------------	-----------------------------	----

Training and Analysis

Weapons Effect Prediction—Firing for Effect	S. Wheeler	33
An Exploratory Study of the Army-as-a-System Core Skills	D. Shine	39

Volume 8 No 2 July 2005

Firepower and Protection

A Numerical Study on the Effect of Explosive Reactive Armour on a Lightweight Armoured Vehicle's Hull	A. Rotariu, P. Hazell, & M. Cernat	1
The MANPAD Threat to Commercial Aircraft		7
..... N. Hock, M. Richardson, B. Butters, R. Walmsley, R. Ayling & W. Taylor		

Command Systems

A Taxonomy for Military Space Operations	M. Frater & M. Ryan	13
Implementation of Certified Message Delivery for Tactical C3I Applications in a Battlefield Information System	A. Agarwal	21

Surveillance and Target Acquisition

Secure Data Delivery in Unattended Ground Sensor Networks	P. Kikiras & J. Avaritsiotis	27
---	------------------------------	----

Training and Analysis

The Assessment of Staff Training Within a Context of Acquiring Military Capability		35
..... M. Dumble & R. Miller		

Book Review

A Review of "EW 102: A Second Course in Electronic Warfare"	M. Ryan	43
---	---------	----

Volume 8 No 3 November 2005

Firepower and Protection

Barrel Cooling: A Key Technology For Improving Gun Performance	B. Wu	1
--	-------	---

Vehicles and Mobility

Mathematical Modelling of a Hydro-gas Suspension Unit for Tracked Military Vehicles		7
..... D.J. Purdy & J.R. Kumar		

Command Systems

MAPCHAT: A System for Online Capture and Dissemination of Tactical Geographic Information		15
..... M.A. Rajesh		
Military Applications of Ultra-wideband Communications	J.W. McCulloch & C.R. Walters	21
Critical Factors Affecting the Military Utility of Networking	A. Kaufman	27

Training and Analysis

Combining Generic Structures and Systems Engineering to Manage Complexity in System Dynamics Modelling	A.C. McLucas & M.J. Ryan	33
--	--------------------------	----

2006

Volume 9 No 1 March 2006

Firepower and Protection

- Gun Barrel Models for Use in Weapon Control System Investigations *D. Purdy* 1
Factors Affecting the Dispersion of Shotgun Pellets in Short-range Combat ... *J. Szmelter & D. Leeming* 9

Command Systems

- Strategic Consequences of Networking *A. Kaufman* 15
Measuring the Agility of Networked Military Forces *A. Dekker* 19

Surveillance and Target Acquisition

- The Vulnerability of Laser Warning Systems Against Guided Weapons Based on Low-power Lasers—
Part I *M. Al-Jaberi, M. Richardson, J. Coath & R. Jenkin* 25

Training and Analysis

- Use of Bayesian Belief Networks for Course of Action Assessment at the Tactical Level *A. Brosnan* 31

Volume 9 No 2 July 2006

Firepower and Protection

- Numerical Study of the Heat Exchanges Occurring in a 120-mm Chromium-coated Gun Barrel and
Comparison with Experimental Results *D. Boisson, M.G. Légeret & R. Cayzac* 1
Fitting a High-performance Gun on a Lighter Platform *A. Hameed, R. Brown & J. Hetherington* 5

Command Systems

- A Comparison of Civilian and Military Networked Command and Control Systems 15
..... *P. Gilby, S. Stockley, J. Walker & C. Walters*

Surveillance and Target Acquisition

- The Vulnerability of Laser Warning Systems Against Guided Weapons Based on Low-power Lasers—
Part II *M. Al-Jaberi, M. Richardson, J. Coath & R. Jenkin* 21
Image Restoration in Horizontal Surveillance By Telescope *D. Fraser, A. Lambert & B. Craig* 27

Training and Analysis

- Sensitivity Analysis of a Bayesian Belief Network in a Tactical Intelligence Application *A. Brosnan* 33

Volume 9 No 3 November 2006

Command Systems

- A Framework for Managing Knowledge Gaps *A. Dyer* 1

Surveillance and Target Acquisition

- The Vulnerability of Laser Warning Systems Against Guided Weapons Based on Low-Power Lasers—
Part III *M. Al-Jaberi, M. Richardson, J. Coath & R. Jenkin* 9
Improving the Protection of the Canadian Light Armoured Vehicle Using a Laser-based Defensive Aids
Suite *J. Fortin, E. Thibeault & G. Pelletier* 13
Testing and Development Methods for Laser Decoy *E. Thibeault, J. Fortin & G. Pelletier* 19

Training and Analysis

- Genetic Algorithms Applied To Course-of-action Development Using The MANA Agent-based Model
..... *G. McIntosh & M. Lauren* 27
Optimal Path Trajectories In A Threat Environment 33
..... *H. Sidhu, G. Mercer, M. Sexton, N. Ansari & Z. Jovanoski*

Book Review

- A Review of “Modern Body Armour and Helmets: An Introduction” *R. Mountford* 40

2007

Volume 10 No 1 March 2007

Firepower and Protection

Ballistic Damage in Structurally Loaded Carbon/Epoxy Composite Panels	1
..... <i>J. Wang & L. Mirabella</i>	
Naval Air Defence: Softkill, Hardkill, and Platform Signature Coordination	9
..... <i>N. Young & B. Stacey</i>	
An Introduction to Electro-explosive Hazard Assessment	13
..... <i>A. Nott</i>	

Command Systems

Command, Control, and Communications: Systems and Structures Towards an ADF Capability in 2016	27
..... <i>S. Wheeler</i>	

Surveillance and Target Acquisition

Human Skin and Hair Spectra Could Reduce Biometric Fraud	34
..... <i>M. Richardson, Robin B. Jenkin, John A. Coath & Clarence Chan</i>	

Book Review

A Review of "Ceramic Armour: Design and Defeat Mechanisms"	39
..... <i>D. Gillott</i>	
A Review of "Avionics Principles"	40
..... <i>M. Patch</i>	

Volume 10 No 2 July 2007

Firepower and Protection

Simulation and Measurement of Fragment Velocity in Exploding Shells	1
..... <i>J. Szmelter, N. Davies & C. Lee</i>	
Mathematical Calculation Model for Guidance Precision, Target Hit and Target Kill Probabilities, in the Case of Close Range-Homing Missiles	9
..... <i>T. Chelaru & M. Cernat</i>	

Command Systems

Fifteen Constraints on the Capability of High-capacity Mobile Military Networked Systems	15
..... <i>C. Kopp</i>	
A Case Study: Flattening the Battlefield Through a C4 Knowledge Management System.....	21
..... <i>R. Caro, J. Quinn & R. Flournoy</i>	
The Transferable 'We': Axes of Identity for the British Infantry Soldier	29
..... <i>C. Kirke</i>	

Surveillance and Target Acquisition

The Vulnerability of Laser Warning Systems Against Guided Weapons Based on Low-Power Lasers— Part IV	37
..... <i>M. Al-Jaberi, M. Richardson, J. Coath & R. Jenkin</i>	

Book Review

A Review of "Joint Publication 3-13.1 Electronic Warfare"	40
..... <i>M. Ryan</i>	

Volume 10 No 3 November 2007

Firepower and Protection

Prediction of Fragment Distribution and Trajectories of Exploding Shells	1
..... <i>J. Szmelter & C. Lee</i>	
Simulation Model for Submunition Warheads	7
..... <i>M. Cernat & T. Chelaru</i>	
Evaluation of Data Collected by a Surveillance System for Gun Propelling Charges Utilizing Conscript Practice Troop Firings	13
..... <i>H. Nyberg</i>	

Command Systems

Considerations on the Use of Airborne X-band Radar as a Microwave Directed-energy Weapon	19
..... <i>C. Kopp</i>	
Metrics for Networked Systems Design in a Network-centric Warfare Context	27
..... <i>V. Kuikka</i>	

Training and Analysis

Aggregate Combat Modelling Using High-resolution Simulation: The "Meeting Engagement" Scenario as a Case Study	37
..... <i>S. Das, P. Sati & Rajiv Gupta</i>	

2008

Volume 11 No 1 March 2008

Firepower and Protection

- Turbulent Atmosphere Influence on Anti-Hailstone Rocket Flight *M. Cernat & T. Chelaru* 1

Command Systems

- A “Thin-Slicing” Approach To Understanding Cognitive Challenges in Real-Time Command and Control *J. Drury & E. Darling* 9
- The Development Of a Defence Concept Technology Demonstrator For Naval Tactical Trunk IP Communications *P. Axon, S. Szybowski, L. Stanger, A. Savins, E. de la Haye, J. Phillips, & C. Fuller* 17
- LGSP: A Lightweight GNSS Support Protocol for Military and Civil Applications *M. Tyson & C. Kopp* 23

Surveillance and Target Acquisition

- Airborne Infrared Observations of Research Vessel Quest *Z. Daya & D. Hutt* 31
- High-Fidelity Infrared Signature Modelling Using Matlab Virtual Reality Toolbox *S. Baqar, M. Richardson & R. Jenkin* 39

Volume 11 No 2 July 2008

Firepower and Protection

- Flat-fire Aerodynamic Jump Performance of Projectiles Fired Sidewise from a Helicopter *D. Gkritzapis* 1

Command Systems

- Dynamic Analysis of the Brigade Combat Team’s C2 Architecture *N. Minami & D. Rhodes* 9

Surveillance and Target Acquisition

- Sharing Detections among Networked Sonars—A Practical Way Forward for Anti-submarine Warfare? *M. Fewell, J. Thredgold & D. Kershaw* 17

Training and Analysis

- Complexity-based Assessment in Crowd Confrontation Modelling *P. Dobias* 23
- Meeting the Challenges of Delivering Software Development Projects *A. McLucas* 31

Volume 11 No 3 November 2008

Firepower and Protection

- A Complex Mathematical Model For Computation Of The Dynamic Launch Zone For Air-To-Air Homing Missiles *T-V. Cheralu & M. Cernat* 1

Command Systems

- Knowledge Flows in a Highly Distributed Community of Practice *R. Caro, J. Quinn, D. Harvey & L. Mentz* 13
- RF Propagation Environment Awareness (RPEA) For Smart Mobile Ad-hoc Networks *M. Tyson C. Kopp & R. Pose* 21

Training and Analysis

- Meeting the Challenges of Delivering Software Development Projects: Simulation of Alternative Project Strategies *A. McLucas* 29

2009

Volume 12 No 1 March 2009

Command Systems

- Substantiating the Value Proposition for NCW—Metrics and Indicators *M. Hue* 1
- Dynamic Content on Support of the User-defined Operational Picture 9
- *A. Cameron, M. Donovan, J. Craig & G. Osborne*

Surveillance and Target Acquisition

- Defence ISR—Decision Support for the Future Force *S. Hledik* 15

Training and Analysis

- Intermittency of Casualties in Asymmetric Warfare *P. Dobias & K. Sprague* 19
- Military Aviation Applications for a Springs and Masses Safest Path Determining Model 27
- *M. Rowe, H. Sidhu & G. Mercer*

History

- Beyond the Anzac Myth: Relative Technological Advantage and the Battle of Bardia *C. Stockings* 33

Volume 12 No 2 July 2009

Firepower and Protection

- Anti-Tank Mine Blast Effects *M. Held* 1
- Sustaining a Serviceable Explosive Ordnance Capability in the Middle East Area of Operations 9
- *M. Rigby*
- Battle Field Damage Repair of a Helicopter Composite Frame-to-skin Junction 13
- *J. Brunel & B. Gresle*

Command Systems

- Digital Ship Internet Protocol Backbone Modelling and Validation *M. Liu & O. Gruber* 23

Surveillance and Target Acquisition

- Portable Electro-optic Device for Performing Serviceability Checks on Laser-guided Munitions 35
- *A. Maini & V. Agrawal*
- Radar Target Transfer Functions and Their Application to Automatic Target Recognition and Matched Illumination Detection *C. Alabaster, F. Soldari, & J. Hyde* 39

Volume 12 No 3 November 2009

Firepower and Protection

- An Assessment of Rapid Prototyping for Aero-Ballistic Wind Tunnel Models 1
- *J. Szmelter & P. Williams*

Command Systems

- Evaluation of Defence Architectures in Support of System Integration *C. Janczura* 9
- Architecture Practice Supporting Connectivity Analysis *M. Hue* 15
- An Integrated Platform for Autonomic Computing for Disaster Relief Operations *P. Kikiras* 29

Surveillance and Target Acquisition

- An H_∞ Filter-based Turn-prediction Algorithm for Tracking of Manoeuvring Targets 35
- *M. Kemouche & N. Aouf*

Training and Analysis

- Development of Cost-effective PC-based High-fidelity Infrared Signature Modelling of Transport Aircraft *H. Sarfraz, A. Mansoor, M. Richardson & S. Baqar* 45