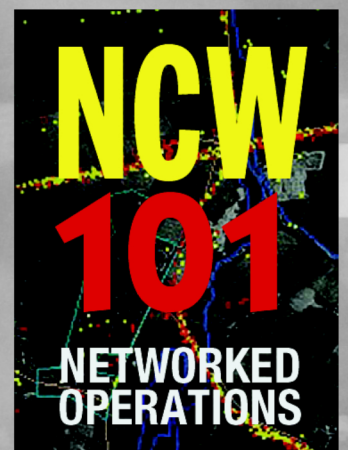


NCW 101

AN INTRODUCTION TO
NETWORK CENTRIC WARFARE

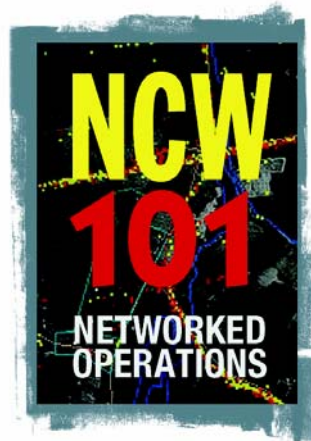
CARLO KOPP



NCW101

AN INTRODUCTION TO NETWORK CENTRIC WARFARE

FIRST EDITION



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This book is dedicated to my colleagues in the computer science and engineering professions, who have changed our world so profoundly over the last four decades. Without their creativity, and persistent and dedicated effort, there would be no Network Centric Warfare, or indeed an Internet and networked world.

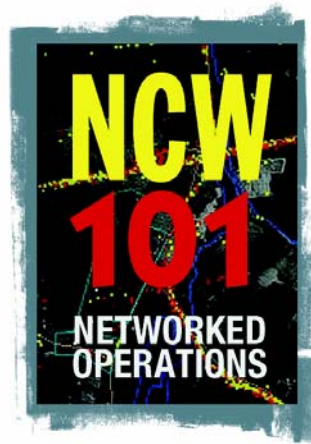


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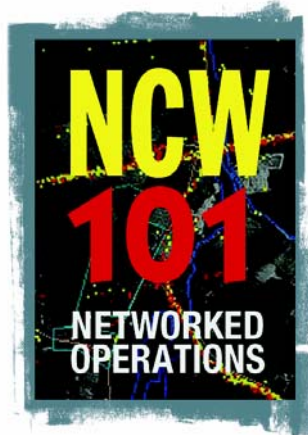
Preface

Networking is the defining paradigm of this time, for better or for worse. It has brought us unprecedented global connectivity, and extended the potency of all digital media. We now live in a largely digital world, where computers and digital networks pervade most aspects of life – one might argue too many.

Inevitably all technologies end up being applied sooner or later to the business of war, and it is no different with networking. Whether the label is “*Network Centric Warfare*”, “*Network Enabled Operations*” or “*Сетецентричная Война*”, the idea is very much the same, which is to use digital networks to link embedded and other computers in military systems. The most basic aim is to accelerate the operational tempo to the detriment of an opponent.

In the military domain, in every respect. While it can operational tempo sought by its difficulties ranging from single through radio propagation not coping with the deluge of

This book is a compilation of all nine related technical essays, *Defence Today* journal between paper dealing with quantitative military systems.



networking is a double edged sword and often does provide the gains in users, it introduces a myriad of point of failure vulnerability, breakdowns, to personnel simply data produced by such systems.

twenty parts of the NCW101 series, all published in Strike Publications' 2003 and 2008, and one research capability modeling of networked

The NCW101 series was produced with the intent of providing an accessible series of technical primers or tutorials for beginners in this area, the scope covering the whole gamut of digital networks, datalinks and communications technologies, the digitised Intelligence, Surveillance and Reconnaissance sensors feeding the network, and the full spectrum of Information Warfare applied against the sensor, network and operator.

Most of this material was written at an undergraduate level, with a qualitative rather than quantitative focus to maximize its accessibility and footprint. The book is suitable as an introductory text for both undergraduate and postgraduate students, as well as military staff college courses.

This text includes an extensive bibliography of related reference materials, intended to provide both professional readers and students of military networking with an accessible list of reading material.

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December, 2008