

1. Record Nr.	UNINA9910220091903321
Autore	Shurkin Michael
Titolo	Setting priorities in the age of austerity : British, French, and German experiences // Michael Shurkin
Pubbl/distr/stampa	Santa Monica, California : , : RAND Corporation, , 2013 ©2013
ISBN	0-8330-8057-1 0-8330-8055-5
Descrizione fisica	1 online resource (97 p.)
Disciplina	355.6 355.6/22 355.622
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Cover; Title Page; Copyright; Preface; Table of Contents; Figures; Tables; Summary; Acknowledgements; Abbreviations; 1. Introduction; 2. Britain; Scope of Reductions; Force Structure and Doctrine; Approach to Readiness; Conclusion; 3. France; Scope of Reductions; Force Structure and Doctrine; Approach to Readiness; Conclusion; 4. Germany; Scope of Reductions; Doctrine and Force Structure; Approach to Readiness; Conclusion; 5. Conclusion; Bibliography
Sommario/riassunto	Examines the British, French, and German armies' approaches to accommodating significant budget cuts while attempting to sustain their commitment to full spectrum operations. Specifically, it looks at the choices these armies are making with respect to how they spend dwindling resources: What force structure do they identify as optimal? How much readiness do they regard as necessary? Which capabilities are they abandoning?

2. Record Nr.	UNINA9910830451403321
Autore	Talbot Daniel (Daniel B.)
Titolo	Frequency acquisition techniques for phase locked loop // author Daniel Talbot
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, Inc., , [2012] [Piscataway, New Jersey] : , : IEEE Xplore, , [2012]
ISBN	1-118-38330-3 1-283-59323-8 9786613905680 1-118-38331-1
Descrizione fisica	1 online resource (238 p.)
Disciplina	621.3815/486 621.382
Soggetti	Frequency synthesizers Phase-locked loops
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
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## Sommario/riassunto

How to acquire the input frequency from an unlocked state A phase locked loop (PLL) by itself cannot become useful until it has acquired the applied signal's frequency. Often, a PLL will never reach frequency acquisition (capture) without explicit assistive circuits. Curiously, few books on PLLs treat the topic of frequency acquisition in any depth or detail. Frequency Acquisition Techniques for Phase Locked Loops offers a no-nonsense treatment that is equally useful for engineers, technicians, and managers. Since mathematical rigor for its own sake can degenerate into intellectual "rigor mortis," the author introduces readers to the basics and delivers useful information with clear language and minimal mathematics. With most of the approaches having been developed through years of experience, this completely practical guide explores methods for achieving the locked state in a variety of conditions as it examines: Performance limitations of phase/frequency detector-based phase locked loops. The quadricorrelator method for both continuous and sampled modes. Sawtooth ramp-and-sample phase detector and how its waveform contains frequency error information that can be extracted. The benefits of a self-sweeping, self-extinguishing topology. Sweep methods using quadrature mixer-based lock detection. The use of digital implementations versus analog Frequency Acquisition Techniques for Phase Locked Loops is an important resource for RF/microwave engineers, in particular, circuit designers; practicing electronics engineers involved in frequency synthesis, phase locked loops, carrier or clock recovery loops, radio-frequency integrated circuit design, and aerospace electronics; and managers wanting to understand the technology of phase locked loops and frequency acquisition assistance techniques or jitter attenuating loops.

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