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Special Interest Groups (SIGs)

Guide to Computing Literature integrated

1954 to the present

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Artificial intelligence

Cloud computing (cloud services)

Graphics / Images

Communication

Databases

Data extraction

Automation design

Integrated systems

Networks

Human-machine interaction

Mobility

Data structure

Security

software

Many other subjects related to computer science, computer science and information technology.



ACM DL- Guide to Computing Literature

- +2 million bibliographic records
- +990 thousand Abstracts or abstracts
- +230 thousand Titles
- +1,000 publishers
- +966 mil Conference Proceedings
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July 1997 **AAAI'97/IAAI'97:** Proceedings of the fourteenth national conference on artificial intelligence and ninth conference on Innovative applications of artificial intelligence

Publisher: AAAI Press

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- [Artificial Intelligence and Software Engineering: Understanding the Promise of the Future, 1st edition](#)

Derek Partridge

April 1998 Artificial Intelligence and Software Engineering: Understanding the Promise of the Future, 1st edition

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1 [SUMEX: a resource for applications of artificial intelligence in medicine](#)
[J. Lederberg, E. Eisenbaum, E. Levinthal, T. Rindfleisch](#)
 January 1974 **ACM '74: Proceedings of the 1974 annual ACM conference - Volume 2**, Volume 2
Publisher: ACM [Request Permissions](#)
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Bibliometrics: Downloads (6 Weeks): 1, Downloads (12 Months): 9, Downloads (Overall): 43, Citation Count:

In partnership with the Biotechnology Resources Branch (BRB) of the Division of Research Resources of the National Institutes of Health, Stanford University is developing a nationally shared computing resource to promote research in artificial intelligence ...

2 [Artificial intelligence and *Goetterdaemrung*: the evolutionary paradigm of the future](#)
[Kenneth E. Kendall](#)
 September 1996 **SIGMIS Database**, Volume 27 Issue 4
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Helen Kelley, Deborah Compeau, Christopher A. Higgins, Michael Parent

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Princeton, NJ, USA

ASPDAC '14 [19th Asia and South Pacific Design Automation Conference](#)
January 20 - 23, 2014
Singapore, Singapore

POPL '14 [The 41st Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages](#)
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San Diego, CA, USA

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AAMAS '13	Proceedings of the 2013 international conference on Autonomous agents and multi-agent systems	SIGART	2013
ACM DEV-4 '13	Proceedings of the 4th Annual Symposium on Computing for Development		2013
ACME '13	Proceedings of the workshop on ACadeMics Tooling with Eclipse	SIGSOFT SIGPLAN	2013
ACMSE '13	Proceedings of the 51st ACM Southeast Conference		2013
ACSAC '13	Proceedings of the 29th Annual Computer Security Applications Conference		2013
ADAPT '14	Proceedings of International Workshop on Adaptive Self-tuning Computing Systems		2014

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‡ [Auctions and bidding: A guide for computer scientists](#)

[Simon Parsons](#), [Juan A. Rodriguez-Aguilar](#), [Mark Klein](#)

ACM Computing Surveys (CSUR)

Volume 43 Issue 2, January 2011

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‡ [What video games have to teach us about learning and literacy](#)

[James Paul Gee](#)

Computers in Entertainment (CIE)

Volume 1 Issue 1, October 2003

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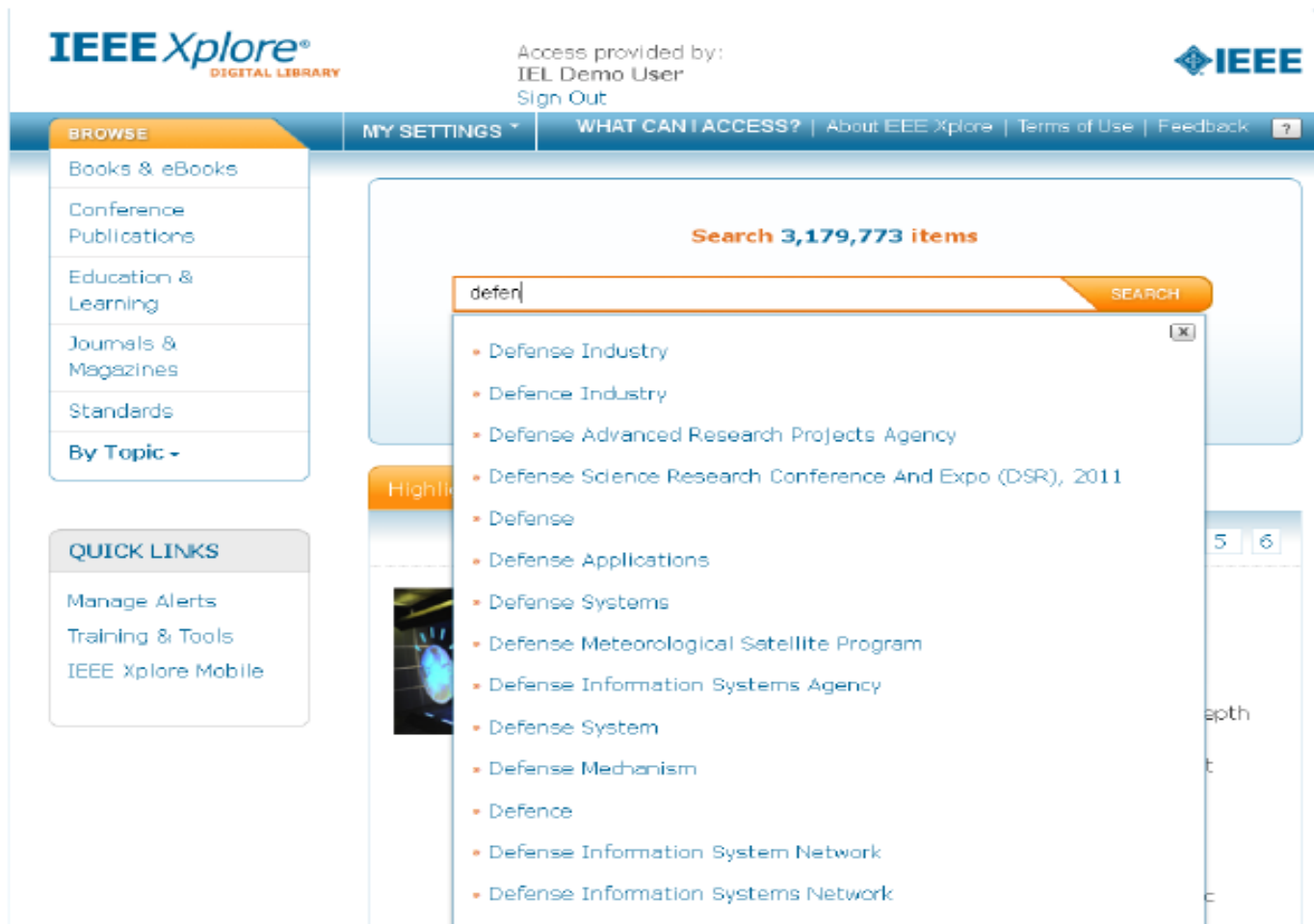
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[Abstract](#) | Full Text: [PDF \(271KB\)](#)
2. Fischella, M., Belfiore, J.-C., "Resource Allocation for QoS-Aware OFDMA Using Distributed Network Coordination", *Vehicular Technology, IEEE Transactions on*, On page(s): 1766 - 1775, Volume: 58 Issue: 4, May 2009
[Abstract](#) | Full Text: [PDF \(1047KB\)](#)
3. Yanmin Wang, Wei Feng, Shidong Zhou, Jing Wang, "Transmit antenna selection in multi-cell multi-user distributed antenna systems with channel correlation", *Computer Application and System Modeling (ICCASM), 2010 International Conference on*, On page(s): V12-51 - V12-55, Volume: 12 Issue: , 22-24 Oct. 2010
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[\[CrossRef\]](#)
2. Wen, Mi Li, Hui Zheng, Yan-fei Chen, Ke-fei "TDOA-based Sybil attack detection scheme for wireless sensor networks", *Journal of Shanghai University (English Edition)*, Vol.12, Iss.1, pp.66, 2008, ISSN: 10076417
[\[CrossRef\]](#)

REFERENCES

1. P. Mehta and S. Udani *Overview of voice over IP*, 2001
2. R. G. Bace *Intrusion Detection*, 2001
3. M. Bishop *Computer Security: Art and Science*, 2001
4. D. Denning *Information Warfare and Security*, 2001
5. D. Gollmann *Computer Security: Art and Science*, 2001
6. W. Stallings *Computer Security: Art and Science*, 2001
7. S. McGinn and I. S. *SIP-based VoIP Security*, 2005
8. D. Sicker and T. *Queue*, vol. 2, Full Text: [Access](#)
9. M. Collier *VoIP* <http://www.voip/index.php?queue=328>
10. P. Hunter *"VoIP Netw. Secur."*, p. 12, 2005
11. E. Edelson *"VoIP Security"*, pp.12, 2005
12. P. Rowe *"VoIP-pp.12, 2005"*
13. P. Theros and *1st IEEE/CREAT* pp.236, 2005 [Abstract](#) | [Full Text](#)
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Integration of packaged RF MEMS switches with radiation pattern reconfigurable square spiral microstrip antennas ?

This paper appears in:

Antennas and Propagation, IEEE Transactions on

Date of Publication: Feb. 2006

Author(s): Huff, G.H.

Dept. of Electr. & Comput. Eng., Univ. of Illinois, Urbana, IL, USA

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ABSTRACT

This work describes the integration of commercially available packaged radio frequency microelectromechanical system (RF MEMS) switches with radiation pattern reconfigurable microstrip antennas. Most applications of RF MEMS switches consider the switches as only circuit elements. In contrast, the implementation of packaged switches in this particular antenna must address not only the simple open/closed behavior of the switches but also their impact on the radiation characteristics of the reconfigurable antenna. Here, two Radant MEMS single-pole single throw (SPST) SPST-RMSW100 (packaged RF MEMS) switches are used to reconfigure the radiation patterns of a resonant square spiral microstrip antenna between endfire and broadside over a common impedance bandwidth. Switch insertion, matching network design, and other issues are addressed. Results for both simulated and measured antennas, as well as recommendations for future work in this area, are provided.

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Security Challenge and Defense in VoIP Infrastructures ?

This paper appears in:
 Systems, Man, and Cybernetics, Part C:
 Applications and Reviews, IEEE Transactions
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Date of Publication: Nov. 2007
Author(s): Butcher, D.
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ABSTRACT

Voice over Internet protocol (VoIP) has become a popular alternative to traditional public-switched telephone network (PSTN) networks that provides advantages of low cost and flexible advanced digital features. The flexibility of the VoIP system and the convergence of voice and data networks brings with it additional security risks. These are in addition to the common security concerns faced by the underlying IP data network facilities that a VoIP system relies on. The result being that the VoIP network further complicates the security assurance mission faced by enterprises employing this technology. It is time to document various security issues that a VoIP infrastructure may face and analyze the challenges and solutions that may guide future research and development efforts. In this paper, we examine and investigate the concerns and requirements of VoIP security. After a thorough review of security issues and defense

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Worldwide Vertical Guidance of Aircraft Based on Modernized GPS and New Integrity Augmentations

With dual frequency signals and an increasing number of satellites in the global positioning system, correction of faulty and misleading aircraft landing approach information can become more rapid and precise.

In the 2020 time frame, the Global Positioning System (GPS) will be fully modernized, and other satellite navigation systems will be operational. With an additional layer of fault detection, these systems will provide vertical guidance worldwide. This capability will be born of three important technologies. First and foremost, avionics will receive signals on two frequencies: L1/E1 and L5/E5a. This frequency diversity will do much to obviate the impact of ionospheric storms that troubles aviation use of GPS today. Secondly, a multiplicity of data broadcasts will be available to convey integrity information from the ground to the airborne users. These will include the navigation satellites themselves, geostationary satellites, and possibly terrestrial transmitters. However, the most important change will be the most subtle. The fault monitoring burden will be split between the aircraft and the supporting ground systems in a new way relative to the fault-detection techniques used in 2008. This new integrity allocation and the associated architectures are the subject of this paper.

This articles appears in *Proceedings of the IEEE*.

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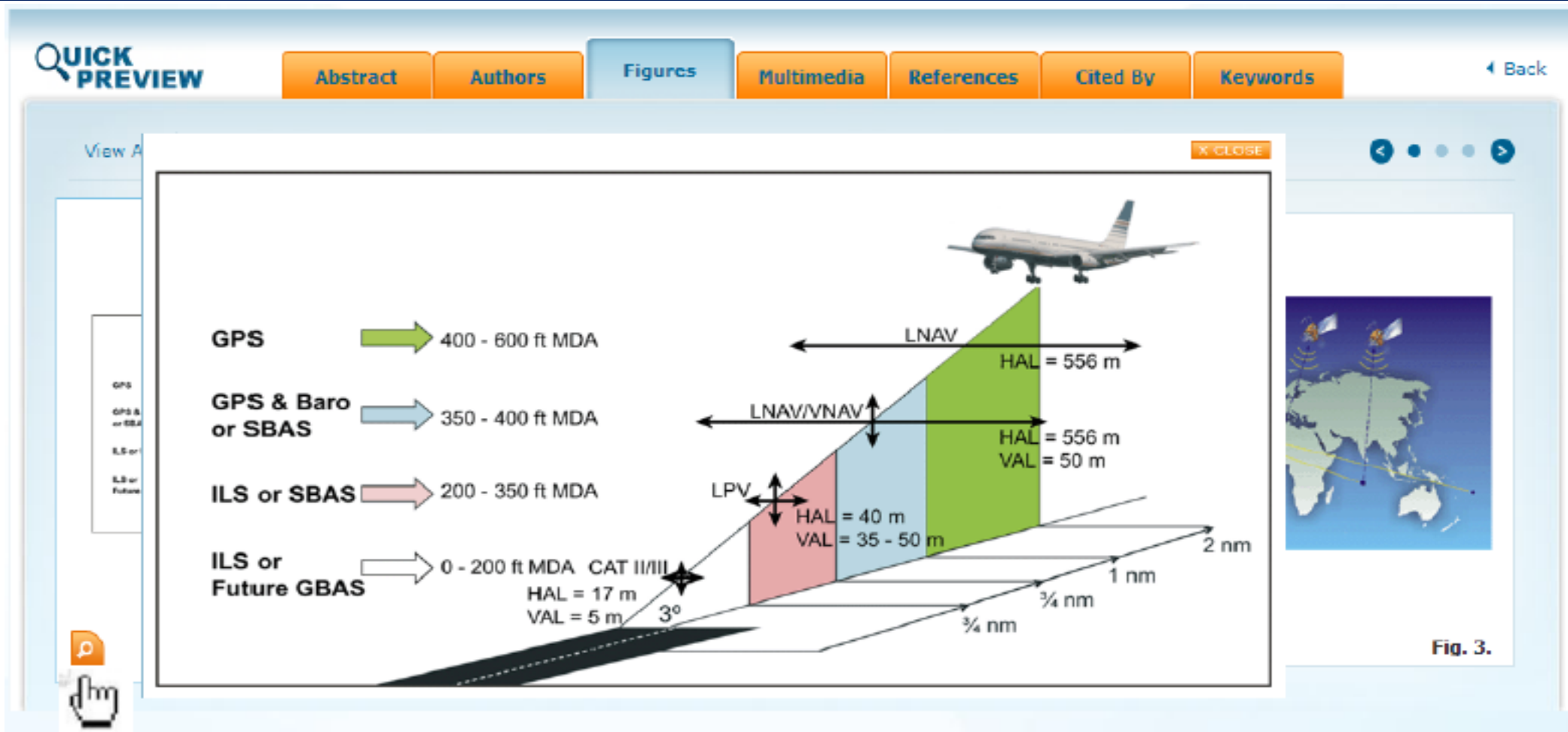








Fig. 3.

This paper concerns itself entirely with the use of modernized GPS [1], [2], [3] and other new satellite navigation systems to aid the navigation of aircraft approaching airports and preparing to land. Vertically guided airport approach deserves such a focused treatment because it is the most demanding phase of flight. The associated requirements on the underlying navigation system are simply extraordinary. Navigation must be available greater than 99% of the time regardless of the weather. The navigation system must be especially reliable after an aircraft approach has commenced. A break in the continuity of the service must affect fewer than one in 100 000 aircraft approaches. In addition, the navigation system must guard vigilantly against the possibility of hazardous misleading information (HMI). In other words, the system must be able to detect any threatening faults or rare-normal events within a few seconds [often referred to as the time-to-alert (TTA)]. These faults are worrisome if they yield undetected navigation errors greater than five to fifty m (depending on the aircraft altitude). This sought after property is called integrity, and the risk of an integrity failure during the approach must be less than 10^{-7} to 10^{-9} per approach (depending on the minimum decision altitude). Further details on these requirements can be found in [Section IV](#).

The approach operation is depicted in [Fig. 1](#). The procedure can be roughly categorized by the lowest decision altitude (DA) enabled by the navigation system. Below this altitude, the pilot must be able to see the runway environment. If not, she or he must abort the landing. Lower DAs demand more crew training and more sophisticated navigation equipment on the ground and in the air. However, lower DAs are certainly desirable in bad weather.



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As described earlier, we wish to provide vertical guidance capability for aircraft down to an altitude as low as 200 ft. One such procedure has been developed called localizer performance with vertical guidance (LPV)-200. The key requirements as specified in the Wide Area Augmentation System (WAAS) program [24] will be briefly outlined in this section. These include accuracy, integrity, time-to-alert, continuity, and availability. There are requirements on both vertical and horizontal positioning. Since the vertical positioning requirements are much more difficult to meet, this paper will focus exclusively on them.

The accuracy requirement is expressed at the ninety-fifth percentile. In the vertical positioning domain, this value must be below 4 m for each aircraft [18], [24]. As the requirement only extends out to 95%, the rare event tails of the error distributions do not impact the evaluation of this criterion. When modeling these errors as Gaussian, comparatively small biases and sigma values can be used.

Another form of accuracy requirement is known as the effective monitor threshold (EMT). The requirement is that a fault must be detected at least 50% of the time when an error is present that creates a vertical positioning error equal to the EMT. Larger errors must be detected with even greater probability. For this paper, the EMT is being evaluated as 15 m. This requirement primarily

For aircraft navigation, fault detection and isolation is paramount. Faults that may cause HMI must be noticed and mitigated in real-time. The operation of GPS has been very reliable and clearly reflects the extraordinary skill of the Air Force personnel that operate and maintain GPS. However, faults have occurred. Some are man-made and others are due to Mother Nature.

For example, the navigation data broadcast by the GPS satellites occasionally contain significant errors. As shown in Fig. 3, the GPS satellites are monitored by a relatively sparse ground control network (five stations are shown in Fig. 3 but eight new stations have been recently added [5]). Measurements at the ground stations are used to predict the orbit of the GPS satellites. These predictions are uploaded to the satellite and broadcast to the users. Generally, this estimated orbit is within 1 or 2 m of the true orbit

6. Broadcast vs. precise GPS ephemerides: A historical perspective
D. L. M. Warren, J. F. Raquet
GPS Solutions, Vol. 7, issue (3), 2003-12

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made longer for these architectures as the ground monitoring is no longer responsible for meeting the 6.2 s TTA on its own.

Continuity requires that the above requirements be met continuously for the duration of the approach. Given that the above requirements are met at the initiation of the approach, the probability that one of them will be exceeded must be at or below 8×10^{-6} per 15 second interval [18], [24].

Availability is the fraction of time that all above requirements are met. For the system to be useful, it must be available at least 99% of the time at any location where LPV-200 service is authorized [18], [24]. For scheduled service, it may need to be available for even greater percentages of time (between 99.9% and 99.999%).

All of the architectures considered for this paper rely on dual frequency ranging measurements. The L1 and L5 signals are combined in a way to eliminate the first-order ionospheric delay [25]. Unfortunately, this combination increases the impact of measurement noise and multipath. The measurement noise term for the j th satellite can be described as normally distributed with zero mean and variance

$$\sigma_{j,DF_air}^2 = \left(\frac{f_1^2}{f_1^2 - f_5^2} \right)^2 \sigma_{L1,j,air}^2 + \left(\frac{f_5^2}{f_1^2 - f_5^2} \right)^2 \sigma_{L5,j,air}^2 \quad (1)$$



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$$\sigma_{j,DF\_air}^2 = \left( \frac{f_1^2}{f_1^2 - f_5^2} \right)^2 \sigma_{L1,j,air}^2 + \left( \frac{f_5^2}{f_1^2 - f_5^2} \right)^2 \sigma_{L5,j,air}^2 \quad (1)$$


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