

**CHAIR**

John W. McCormick, University of Northern Iowa, Cedar Falls, IA 50614-0507 USA  
Phone: +1 (319) 273-6056, Fax: +1 (319) 273-7123, [mccormick@cs.uni.edu](mailto:mccormick@cs.uni.edu)

**VICE-CHAIR FOR MEETINGS AND CONFERENCES**

Ricky E. Sward, The MITRE Corporation, 1155 Academy Park Loop Colorado Springs, CO 80910 USA  
Phone: 1+ (719) 572-8263, [rsward@mitre.org](mailto:rsward@mitre.org)

**VICE-CHAIR FOR LIAISON**

Chris B. Sparks, 6584 W. Wilhoit Way, Marana, AZ 85743  
[mr\\_ada@comcast.net](mailto:mr_ada@comcast.net)

**SECRETARY**

Clyde Roby, Institute for Defense Analyses, 4850 Mark Center Drive, Alexandria, VA 22311 USA  
Phone: +1 (703) 845-6666, [roby@ida.org](mailto:roby@ida.org)

**TREASURER**

Martin C. Carlisle, HQ USAFA/DFCS, 2354 Fairchild Dr, Ste 6G101, USAF Academy, CO 80840-6234 USA  
[CarlisleM@ACM.Org](mailto:CarlisleM@ACM.Org)

**INTERNATIONAL REPRESENTATIVE**

Dirk Craeynest, c/o K.U.Leuven, Dept. of Computer Science, Celestijnenlaan 200-A, B-3001 Leuven (Heverlee)  
Belgium, [Dirk.Craeynest@cs.kuleuven.be](mailto:Dirk.Craeynest@cs.kuleuven.be)

**PAST CHAIR**

Currie Colket, The MITRE Corporation, 7515 Colshire Drive, McLean, VA 22102-7508, USA  
Phone: +1.703.801-4801 (work), +1.703.801-4801 (home)

**For advertising information contact:**

Advertising Department  
2 Penn Plaza, Suite 701, New York, NY 10121-0701  
Phone: (212) 869-7440; Fax (212) 869-0481

Is your organization recognized as an Ada supporter? Become a SIGAda INSTITUTIONAL SPONSOR! Benefits include having your organization's name and address listed in every issue of Ada Letters, two subscriptions to Ada Letters and member conference rates for all of your employees attending SIGAda events. To sign up, contact Rachael Barish, ACM Headquarters, 2 Penn Plaza, Suite 701, New York, NY 10121-0701, and email: [MEETING@ACM.ORG](mailto:MEETING@ACM.ORG), Phone: 212-626-0603.

Interested in reaching the Ada market? Please contact Jennifer Booher at Worldata (561) 393-8200 Ext. 131, email: [platimer@worldata.com](mailto:platimer@worldata.com). Please make sure to ask for more information on ACM membership mailing lists and labels.

Ada Letters (ISSN 1094-3641) is published three times a year by the Association for Computing Machinery, 2 Penn Plaza, Suite 701, New York, NY 10121-0701 USA. The basic annual subscription price is \$20.00 for ACM members.

POSTMASTER: Send change of address to Ada Letters:  
ACM, 2 Penn Plaza, Suite 701, New York, NY 10121-0701 USA

**Notice to Past Authors of ACM-Published Articles**

ACM intends to create a complete electronic archive of all articles and/or other material previously published by ACM. If you have written a work that has been previously published by ACM in any journal or conference proceedings prior to 1978, or any SIG Newsletter at any time, and you do NOT want this work to appear in the ACM Digital Library, please inform [permissions@acm.org](mailto:permissions@acm.org), stating the title of the work, the author(s), and where and when published.

## From the Editor's Desk

*Alok Srivastava*

Welcome to this issue of Ada Letters which primarily presents the Proceedings of 13th International Real-Time Ada Workshop (IRTAW) held from 17–19 April 2007 at Woodstock, Vermont, USA. The proceedings were put together by Prof. Juan Antonio de la Puente of the Technical University of Madrid, Spain.

This issue also provides Advance Program of SIGAda 2007 Conference to be held from November 4-9 in Fairfax Virginia, a suburb of Washington DC. Besides the regular main conference sessions, the event also organizes a wide range of interesting tutorials to bring you up to date on the technology. Three outstanding speakers will deliver keynote addresses Joe Jarzombek, Director at National Cyber Security Division of US Department of Homeland Security (DHS), Jeff O'Leary of Federal Aviation Administration (FAA) spearheading the software development of En-route Air Traffic Control Systems and Rod Chapman of Praxis High Integrity Systems UK on the concept of design-by-contract facilities in languages such as Eiffel, SPARK and confer problems in designing and building high-integrity software.

The SIGAda 2007 conference also brings an extensive two-day workshop "Static Analysis Summit II" supported by the National Institute of Standards and Technology (NIST) and the US Department of Homeland Security (DHS). The summit will be conducted in a combination format with paper presentations, panel discussions followed by guided dialogues by leaders in the Software Static Analysis domain. The other Workshop will be on Hibachi which is an open source (EPL), standard, extensible, vendor-neutral Ada development environment. All the workshops are free to the minimum one day registrants. Besides Lockheed Martin, another Information Systems and Aeronautics giant **Northrop Grumman** has joined the list of platinum level sponsors of this year's SIGAda Conference with AdaCore and OC Systems.

Of interest to all Ada users and enthusiasts, is the new revision to the Ada language, Ada 2005 which became an official ISO Standard in March this year. In this issue you'll find information on an Ada Conference in UK this September and Ada-Europe 2008 in Venice, Italy. These conferences will be great opportunities to learn more about what is in the new revision of the Ada language, and how implementations of Ada 2005 are accomplished, as well as other research and industry uses of Ada.

Ada Letters would be a great place to submit articles on your experiences with the language revision, tips on how to do things with the new language features, as well as to describe success stories using Ada. We'll look forward to your submission. You can submit either a MS Word or Adobe PDF file (with 1" margins and no page numbers) to our technical editor:

Pat Rogers, Ph.D.  
AdaCore, 207 Charleston, Friendswood, TX 77546 (USA)  
+1 281 648 3165, rogers@adacore.com

We look forward to hearing from you!  
Alok Srivastava, Ph.D.  
Air Traffic Control Systems Development  
Northrop Grumman  
475 School St, SW; Washington, DC 20024 (USA)  
+1 202 314 1419 Alok.Srivastava@AUATAC.Com

## Editorial Policy (from Alok Srivastava, Managing Editor)

As the editor of Ada Letters, I'd like to thank you for your continued support of ACM SIGAda, and encourage you to submit articles for publication. In addition, if there is some way we can make Ada Letters more useful to you, please let me know. Note that Ada Letters is now on the web! See [http://www.acm.org/sigada/ada\\_letters/index.html](http://www.acm.org/sigada/ada_letters/index.html). The two newest issues are available only to SIGAda members. Older issues beginning March 2000 are available to all.

Now that Ada is standing on its own merits without the support of the DoD, lots of people and organizations have stepped up to provide new tools, mechanisms for compiler validation/assessment, and standards (especially ASIS). The Ada 2005 language version is fulfilling the market demand of robust safety and security elements and thereby generating a new enthusiasm into the software development. Ada Letters is a venue for you to share your successes and ideas with others in the Ada community. Be sure to take advantage of it so that we can all benefit from each other's learning and experience.

As some of the other ACM Special Interest Group periodicals have moved, Ada Letters also transitioned from quarterly to a **tri-annual publication**. With exception of special issues, Ada Letters now is going to be published three times a year, with the exception of special issues. The revised schedules and submission deadlines are as follows:

Deadline	Issue	Deadline	Issue
October 1 <sup>st</sup> , 07	December 2007	February 1 <sup>st</sup> , 08	April 2008
June 1 <sup>st</sup> , 08	August 2008	October 1 <sup>st</sup> , 08	December 2008

**Please send your article to Dr. Pat Rogers at [rogers@adacore.com](mailto:rogers@adacore.com)**

### Guidelines for Authors

Letters, announcements and book reviews should be sent directly to the Managing Editor and will normally appear in the next corresponding issue.

Proposed articles are to be submitted to the Technical Editor. Any article will be considered for publication, provided that topic is of interest to the SIGAda membership. Previously published articles are welcome, provided the previous publisher or copyright holder grants permission. In particular, keeping with the theme of recent SIGAda conferences, we are interested in submissions that demonstrate that "Ada Works." For example, a description of how Ada helped you with a particular project or a description of how to solve a task in Ada are suitable.

Although Ada Letters is not a refereed publication, acceptance is subject to the review and discretion of the Technical Editor. In order to appear in a particular issue, articles must be submitted far enough in advance of the deadline to allow for review/edit cycles. Backlogs may result in an article's being delayed for two or more issues. Contact the Managing Editor for information on the current publishing queue.

Articles should be submitted electronically in one of the following formats: MS Word (preferred) Postscript, or Adobe Acrobat. All submissions must be formatted for US Letter paper (8.5" x 11") with one inch margins on each side (for a total print area of 6.5" x 9") with no page numbers, headers or footers. Full justification of text is preferred, with proportional font (preferably Times New Roman, or equivalent) of no less than 10 points. Code insertions should be presented in a non-proportional font such as Courier.

The title should be centered, followed by author information (also centered). The author's name, organization name and address, telephone number, and e-mail address should be given. For previously published articles, please give an introductory statement (in a distinctive font) or a footnote on the first page identifying the previous publication. ACM is improving member services by creating an electronic library of all of its publications. Read the following for how this affects your submissions.

### **Notice to Contributing Authors to SIG Newsletters:**

By submitting your article for distribution in this Special Interest Group publication, you hereby grant to ACM the following non-exclusive, perpetual, worldwide rights:

- to publish in print on condition of acceptance by the editor
- to digitize and post your article in the electronic version of this publication
- to include the article in the ACM Digital Library
- to allow users to copy and distribute the article for noncommercial, educational or research purposes

However, as a contributing author, you retain copyright to your article and ACM will make every effort to refer requests for commercial use directly to you.

### **Notice to Past Authors of ACM-Published Articles**

ACM intends to create a complete electronic archive of all articles and/or other material previously published by ACM. If you have a work that has been previously published by ACM in any journal or conference proceedings prior to 1978, or any SIG Newsletter at any time, and you do NOT want this work to appear in the ACM Digital Library, please inform [permissions@acm.org](mailto:permissions@acm.org), stating the title of the work, the author(s), and where and when published.

### **Back Issues**

Back issues of Ada Letters can be ordered at the price of \$6.00 per issue for ACM or SIGAda members; and \$9.00 per issue for non-ACM members. Information on availability, contact the ACM Order Department at 1-800-342-6626 or 410-528-4261. Checks and credit cards only are accepted and payment must be enclosed with the order. Specify volume and issue number as well as date of publication. Orders must be sent to:

ACM Order Department, P.O. Box 12114, Church Street Station, New York, NY 10257  
or via FAX: 301-528-8550.

## KEY CONTACTS

### Technical Editor

*Send your book reviews, letters, and articles to:*

Pat Rogers  
AdaCore  
207 Charleston  
Friendswood, TX 77546  
+1-281-648 3165  
rogers@adacore.com

### Managing Editor

*Send announcements and short notices to:*

Alok Srivastava  
Northrop Grumman  
475 School Street, SW  
Washington DC 20024  
+1-202-314-1419  
Alok.Srivastava@auatac.com

### Advertising

*Send advertisements to:*

William Kooney  
Advertising/Sales Account Executive  
2 Penn Plaza, Suite 701  
New York, NY 10121-0701  
Phone: +1-212-869-7440  
Fax: +1-212-869-0481

### Local SIGAdas

*Send Local SIGAda address changes to:*

Chris B. Sparks  
6584 W. Wilhoit Way  
Marana, AZ 85743  
mr\_ada@comcast.net

### Ada CASE and Design Language Developers Matrix

*Send ADL and CASE product Info to:*

Judy Kerner  
The Aerospace Corporation  
Mail Stop M8/117  
P.O. Box 92957  
Los Angeles, CA 90009  
+1-310-336-3131  
kerner@aero.org

### Ada Around the World

*Send Foreign Ada organization info to:*

Dirk Craeynest  
c/o K.U.Leuven, Dept. of Computer Science,  
Celestijnenlaan 200-A, B-3001 Leuven (Heverlee)  
Belgium  
Dirk.Craeynest@cs.kuleuven.be

### Reusable Software Components

*Send info on reusable software to:*

Trudy Levine  
Computer Science Department  
Fairleigh Dickinson University  
Teaneck, NJ 07666  
+1-201-692-2000  
levine@alpha.fdu.edu

**SIGAda Working Group Chairs**  
See <http://www.acm.org/sigada/> for most up-to-date information

**Ada Application Programming Interfaces WG**

Geoff Smith  
IBM Rational Software  
15300 SW Koll Parkway  
Beaverton, OR 97006  
503-578-3571  
Fax: 503-578-3571  
gsmith@us.ibm.com

**Standards WG**

Robert Dewar  
73 5th Ave.  
New York, NY 10003  
212-741-0957  
Fax: 232-242-3722  
dewar@cs.nyu.edu

**Ada Semantic Interface Specification WG**

<http://www.acm.org/sigada/wg/asiswg/asiswg.html>  
Bill Thomas  
The MITRE Corp  
7515 Colshire Drive  
McLean, VA 22102-7508  
Phone: 703-983-6159  
Fax: 703-983-1339  
Email: BThomas@MITRE.Org

**Education WG**

<http://www.sigada.org/wg/eduwg/eduwg.html>  
Mike Feldman  
420 N.W. 11th Ave., #915  
Portland, OR 97209-2970  
Email: MFeldman @ seas.gwu.edu

## Ada Around the World (National Ada Organizations)

From: <http://www.ada-europe.org/members.html>

### Ada-Europe

Tullio Vardanega  
University of Padua  
Department of Pure and Applied Mathematics  
Via Trieste 63  
I-35121, Padova  
Italy  
Phone: +39-049-827-1359  
Fax: +39-049-827-1444  
e-mail : [tullio.vardanega@math.unipd.it](mailto:tullio.vardanega@math.unipd.it)  
<http://www.ada-europe.org/>

### Ada-Belgium

Dirk Craeynest  
C/o K.U.Leuven, Dept. of Computer Science,  
Celestijnenlaan 200-A, B-3001 Leuven (Heverlee)  
Belgium  
Phone: +32-2-725 40 25  
Fax : +32-2-725 40 12  
e-mail : [Dirk.Craeynest@cs.kuleuven.be](mailto:Dirk.Craeynest@cs.kuleuven.be)  
<http://www.cs.kuleuven.be/~dirk/ada-belgium/>

### Ada in Denmark

Jørgen Bundgaard  
e-mail: [Info at Ada-DK.org](mailto:Info at Ada-DK.org)

### Ada-Deutschland

Peter Dencker  
c/o Parasoft Deutschland GmbH  
Bayerstraße 24  
D-80335 München  
Germany  
Phone: +49-89 4613323-15  
Fax : +49-89 4613323-23  
e-mail: [dencker@parasoft.de](mailto:dencker@parasoft.de)  
<http://www.ada-deutschland.de/>

### Ada-France

Association Ada-France  
c/o Jérôme Hugues  
Département Informatique et Réseau  
École Nationale Supérieure des Télécommunications  
46, rue Barrault  
75634 Paris Cedex 135  
France  
e-mail : [bureau@ada-france.org](mailto:bureau@ada-france.org)  
<http://www.ada-france.org/>

### Ada Spain

J. Javier Gutiérrez  
P.O. Box 50.403  
E-28080 Madrid  
Spain  
Phone: +34-942-201394  
Fax : +34-942-201402  
e-mail: [gutierjj@unican.es](mailto:gutierjj@unican.es)

### Ada in Sweden

Attn. Rei Strähle  
Box Saab Systems  
S:t Olofgatan 9A  
SE-753 21 Uppsala  
Sweden  
Phone: +46-73-437-7124  
Fax : +46-85-808-7260  
e-mail : [Rei.Strahle@saabgroup.com](mailto:Rei.Strahle@saabgroup.com)  
<http://www.ada-i-sverige.se/>

### Ada in Switzerland

Ahlan Marriott  
White Elephant GmbH  
Postfach 327  
CH-8450 Andelfingen  
Switzerland  
Phone: +41 52 624 2939  
Fax : +41 52 624 2334  
e-mail: [ada@white-elephant.ch](mailto:ada@white-elephant.ch)  
<http://www.ada-switzerland.org/>

### Italy

Contact [tullio.vardanega@math.unipd.it](mailto:tullio.vardanega@math.unipd.it)

### Ada-Europe Secretariat

e-mail: [secretariat@ada-europe.org](mailto:secretariat@ada-europe.org)