INCOSE UK Newsletter

All Things Brighton - Beautiful!

For once I have very little to say to introduce this Newsletter. The contributions that follow tell of a highly successful Symposium that seems to have been appreciated by those who attended.

It is just as well that other people contributed plenty of material, because I didn't get to see much of the event until the sessions on Thursday. I was closeted with 7 laptops trying to help the presenters get their material installed correctly. There is always next year, and when I find time I can read the papers on the CD-ROM.

We must say a big thank you to all those organisations which supported the event in their many different ways. It would not have been possible to put on such a good show without their help.

So now it is time to turn our minds to the Autumn Event and (presumably) the next UK Symposium. We have many new members thanks to I '99 - welcome to you all - and we will be doing everything possible to ensure that both old and new members are keen to renew their subscription in June 2000.

Pete Lister

President's Corner

In the afterglow, or aftermath of Brighton - depending on your point of view - there are a number of lessons to be learned, actions to take, initiatives to get under way.

First, we know from the experience of other Chapters that have hosted the International Symposium that there can be a very deadly lull of Chapter activity after the Big Event. We have tried to forestall this by having a largely separate team of people working on the next Chapter event - an Autumn mini-symposium, to replace what became known as the AGM Event. Further details for this

event will be published shortly. The details are not as advanced as we had planned, largely because I have asked for a review and alterations to the programme, building more on the experience of Brighton than we had otherwise planned to do.

We are also concentrating some of our efforts on increasing locally based activity. We had an overwhelmingly successful event at Bristol earlier this year. There is nothing to prevent a repeat of this success if we follow the same formula. What is needed is a local champion, to host the event and to do the necessary pre-positioning, advertising and strategic arm-twisting. John Mead will be very pleased to hear from any willing volunteers. The UK Chapter organisation will do the rest including finding some funds, a speaker or speakers, and, probably, some warm bodies.

On the INCOSE deliverables side, I thought the INCOSE Central stand was a bit disappointing at Brighton. However, we do need to learn to do most of our business in this respect by e-mail and the Internet. Try visiting the INCOSE web site, which is constantly being improved, with a members only area, goodies to download and useful hot links.

I don't know how well my call went for more involvement by Chapter members with the Interest and Working Groups of INCOSE. I didn't get along to a single one because of my Technical Chair activities. Perhaps members can use this Newsletter or the INCOSE UK web site to take further any interest generated. Several of the IGs and WGs are very actively considering and doing things to improve the way that their members can work remotely. There seems to be a general recognition that the mad scrambles of hastily arranged meetings twice a year - once at the International Workshop and then at the Annual Symposium (when folk want to be doing other things) - is no longer feasible.

I'd like to draw attention to one area of interest that is not presently covered by the INCOSE Technical Committees

Cradle®-3 *with WorkBench*   3SL

Workbench

- Configurable and focused access to project data
- Enables all functions and disciplines to navigate through, create, and edit data in the common Project Database
- Every team member benefits from working on a single database in a multi-user environment
- An invaluable tool for all engineers and managers in the project, providing intuitive navigation directly to the data that is important

Requirements Management

- Able to deal with customer or internally generated source documents including those from Microsoft Word
- Automatically identifies differences between versions of a source document and produces an impact analysis report
- Can store graphs, spreadsheets, tables, diagrams, and any other information as part of a requirement
- Can trace requirements throughout the entire project lifecycle

Document Management

- Contains over two thousand different report formats already configured in the database
- Templating tool to replicate any company standard documents
- Can link to external DTP packages such as Word, FrameMaker, and Interleaf
- Formal documents can be defined for formal project deliverables with specific references, issues, and issue states, and can then be controlled within the Cradle environment
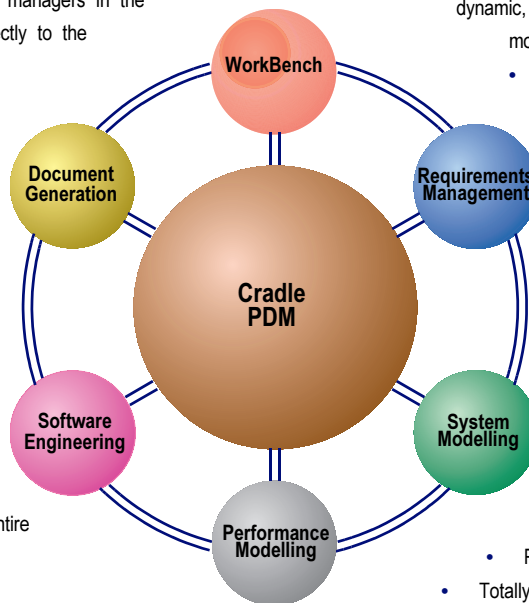
Software Engineering

- Supports code generation and reverse engineering
- Languages supported are C, C++, Ada, and Pascal

System Modelling

- Method-independent database that supports notations for functional, dynamic, data, architecture, subsystem, and behavioural modelling
  - Object Oriented support (UML)
    - All notations supported are fully integrated with each other
    - Enables customers to choose the specific combinations of notations most applicable at each point in the analysis and design process
    - All notations can be traced to the requirements and throughout the entire project lifecycle

Performance Modelling

- Verifies the validity and integrity of a system early in the project lifecycle
- Provides graphical impact analysis
- Totally user-extensible
- Allows incorporation of external programs during analysis runs

Cradle PDM

- Functionality includes Configuration Management, Text and Graphics Reporters, workflow, project control, and third party integration facilities
- Allows externally generated information such as CAD drawings, ECAD or MCAD designs, spreadsheets, and DTP files to be configuration managed in one place, linking all program information tightly together
- Foundation technology on which all Cradle products are built
- Has the ability to act as a framework for program information

For more information, please contact 3SL:

UK and Europe:
Tel: +44 (0) 1491 412340
Fax: +44 (0) 1491 412350
e-mail: sales@threesl.com
Web Site: www.threesl.com

North America:
Tel: (301) 570 6120
Fax: (301) 570 6143
e-mail: ussales@threesl.com
Web Site: www.threesl.com

Free CD with this newsletter

and that is Soft Systems Engineering. We had a session on this at Brighton and it received the highest number of positive comments on the paper evaluation sheets than for any other session by a factor of two to three. I interpret this as a reflection of strong interest in the subject because it deals with whole system issues. My colleague, John Boardman, has raised the possibility (the spectre for some, no doubt) of a Soft Systems Interest Group. It may be hard for the INCOSE Technical Board to contend with this, after all, which Technical Committee could they hand it to? What area of Systems Engineering would they say Soft Systems techniques were a part? I'd like to suggest that if there is sufficient interest in the UK Chapter on this subject, then we'll get our own Interest Group going and see how quickly we can grow this, including outwards, to the International level. Any initial expressions of interest, please send to John Boardman at boardman@dmu.ac.uk. There will shortly be an item on the INCOSE UK web site addressing this issue.

Allen Fairbairn

INCOSE '99 - After the Event

What an International Success! Delegates from twenty countries, one hundred and seventy new members. The reach and reputation of INCOSE around the world has been given a real boost through the quality and success of this event.

Whilst outside of the Metropole hotel 'sunny' Brighton only lived up to its reputation for part of the time, within the Metropole things were very sunny indeed. The quality of the programme was self-evident with over one hundred and sixty top papers and views from around the world in thirteen panel sessions. Three plenaries, eighteen tutorials and the Academic Forum at the University of Sussex, all contributed to a packed and exciting programme.

The exhibition opened on the first evening with a reception for over five hundred delegates, providing a good start to the main part of the Symposium. This, and the proximity of all events around the exhibition hall with refreshments served there, kept the exhibitors happy. Thirty-five organisations were represented in the exhibition that occupied fifty booths.

The invited speakers gave us plenty to think about. Sir Robert May expounded his theories and practical experience of high technologies and blowing holes through a few preconceived ideas relating national success stories to national populations and rewriting the league tables in the process. Our Banquet speaker Laurie Taylor amused us with his views on the effect of everyday technology upon the family and society whilst raising some fundamental concerns about the importance of human interactions. Professor Joan

Solomon appealed to the process and support needed to teach and establish systems thinking within the educational environment and Professor Philip M'Pherson told us Systems Engineering was nothing new and provided a forty-five-year history with documentary evidence.

The ongoing work of INCOSE was evident through the activities of the Technical Board, Committees and Working Groups. One objective of the Symposium was to encourage new membership of the Working and Interest Groups. The Chapters and Membership Committees were busy with advising the growing number of start up and emerging chapters.

The support of our nine Patrons was fantastic and absolutely necessary for INCOSE to be able to commit to such a comprehensive celebration of Systems Engineering. We trust they were all happy with the result.

The biggest and the best? What do you think, only your personal experience will tell you if it was the best? The statistics tell us that there were seven hundred and thirteen delegates and over two hundred more exhibitor staff. Earlier predictions that Americans did not generally know where England is were proven unfounded as two hundred and eighty-three US delegates found it, beating the home audience by seventeen! We hope that they all found it worth the trip and enjoyed it as much as we all did.

The General Chair's biggest challenge? - perhaps it was orchestrating the closing plenary - this has a reputation of over-running! There was a grim determination to get all the contributors to provide brief summaries of INCOSE's work during the week, supported by slides assembled into a single presentation. Confronted by this demand, all the INCOSE officers and others involved responded magnificently and with good humour; a seventy-four slide presentation was assembled in about two hours from nearly twenty contributions. We only got one slide in the wrong place and although the plenary started ten minutes late, it finished only three minutes late!

Peter Robson

Confession of the Brighton 99 Technical Chair

I have to confess that I ended Thursday morning of the Symposium in Brighton with a huge sigh of relief. You see, that was when the formal technical programme for the Brighton Symposium finished and my involvement largely ended. Others still had a lot of work to do - there was another day of tutorials, for instance - for Peter Robson and Stuart Cornes to carry on with. But for me, there would be no more threats of authors not showing

up for presentations, no more AV problems to deal with, no more last minute fixes to arrange.

Being part of the organisation for a large, live event like an International Symposium can be a harrowing experience. It wasn't for me, because the team had done a great job of preparation beforehand, leaving time and resources to deal with the live problems on the day. I am particularly indebted to Paul Davies who dealt with the Panel Sessions of the Formal Programme (15 out of the 56 formal sessions). We eventually referred to Paul affectionately as the Panel Beater, since that is what he sometimes had to do, to get them organised. Pete Lister did a great job with the CD-ROM production, and I owe him a special debt of thanks for stepping in during the event to supervise the loading of presentations onto the lap tops. Cass Jones and Christine Kowalski of PCMI - the professional Conference Organisers - were thoroughly professional in all that they did. They adapted very well to our general need to make it up as we went along - I believe the more usual term is prototyping - for this first time for INCOSE of handling all paper transactions electronically.

I should also mention the thirteen members of the Symposium Technical Committee who carried out a great deal of work with paper reviewing and so on. The committee was the type I like - we never actually met, so were able to get a lot of things done very quickly. For instance, the committee organised more than 1200 paper reviews by 150+ people and delivered the results in less than six weeks, including a Christmas Holiday Break.

The whole programme for the Symposium had been condensed down from 12 to 10 months and a number of key decisions had to be taken on the hoof. For instance, by the first due date for receipt of papers, (30th September 1998) we had only 50 or so. The decision to extend the deadline was more than vindicated when we had grown this figure to 297 by the revised date of November 16th! And, of course, this is largely what goes toward making a Symposium successful. Even with the best organisation in the World, no Symposium will be successful without good papers. If Brighton has been successful, it is because we were overwhelmed with a large number of quality papers drawn from a broad, truly International field. However, there was no gain without pain here. The handling of such a large number of papers in an already tight programme that had just been shortened by another six weeks meant that we really did bump up against the final end stops for things like publication deadlines. I must confess to probably adding a number of grey hairs to my colleagues by taking most things to the absolute final call. But then, what's the point of having milestones if you can't utterly exploit them?

Was the Symposium a success? Ironically, I don't have a clear personal view, as I saw so little of it during the Brighton week. I know that a lot of very good papers were

included in the programme - I still have a list of about 30 or so in my "absolutely must read" category. I also got valuable feedback from the Paper Evaluation sheets that formed the basis of the Best Presentation Awards.

Let me encourage UK members to make their views on the Event known. We did ask for session reports to be submitted. It's not too late to do this. Send your report to reporter@incose.org

Allen Fairbairn

So We Must Have Got Something Right!!

(A compendium of messages received by Peter Robson post INCOSE 99)

From a message sent to Ken Ptack, INCOSE President:

"I just returned from Brighton and want to tell you I thought it was one of the finest symposia I've ever attended -- of any organization. The arrangements, etc., were very well done. But even more important was the nature of the papers and the people I met. I came away energized and charged up beyond the level I've felt in a long time and hope to accomplish some good things as a result of this "re-charge" of my batteries. And I'll be there in Minneapolis and in Sydney to get re-charged again!

"My respect for INCOSE grew enormously as a result of the symposium."

From Bill Schoening, Past President:

"I am proud to be an officer of INCOSE. All of you did a terrific job."

From Sarah Sheard:

"And of course thousands of thanks to you and your committees! We who go to the symposium every year have higher and higher expectations, and each year we learn that more and more can be accomplished. This year, we learned that a symposium can be planned a very long way from the people and places where symposia have been before.

"Those of us who have been around for a while have learned that, like much of systems engineering, the things we work hardest on to make them go well are invisible and unappreciated, and those that have problems stick out like sore thumbs, for people to complain about. Frankly, from this vantage point of a few days and a few thousand miles, I can't remember a single thing I found appalling or even persistently annoying. Yet I feel fairly confident that whatever people were annoyed with is what found a way to your ears and those of the committee during symposium week, whether they were things under your control or not.

"Allow me to enumerate some of the things I found went well:

The hotel was in a beautiful location, truly easy to get to via train and taxi. The hotel had a room for me when I arrived at 08:30! almost 8 hours before the advertised time. The chambermaids were efficient and invisible. The rooms for the working groups were well-signed, of appropriate size, and had the right equipment in them. We were not bothered by requests to clear out now so they could set up for the next group -- someone had arranged enough set-up time between events. Audio-visual equipment was where it needed to be, at the right time, and generally worked, and when there were problems, staff were there to fix the problems within minutes. The registration area was fully functional and staffed by people who had clearly made appropriate preparation -- boy, do I know what it takes to stuff all those bags and envelopes. At the last conference I attended, people received tickets that didn't match what they had paid for or had no information on them -- yours were correct and informative. The speaker prep room had computers running for each presentation room so it was a no-brainer how to put my presentations on. Session chairs were well prepared. There was water for the speakers. Food was ready when due for breaks and lunch. The banquet ran smoothly. A waiter even inquired about "special food needs", which reminded me to caution about my allergies to mushrooms. Keynote speakers knew where to be when, and in all the cases I saw, were relevant and interesting. There was plenty of informative information available on the web in advance of the symposium.

"In general, I can't remember a symposium that was clearly better run, and I have been going since 1992. In addition, you were working with new challenges. Three cheers for a job well done!"

From Jerry Lake, Past President:

"I second everything that Sarah has said. Thanks for a job well done. Most enjoyable event!"

From Peter Brook (INCOSE Director at Large), cc Ken Ptack

"I see that you and the committee are rightly receiving multiple accolades for the quality of the conference last week. Let me add mine, and relay the comments made at the closing BoD meeting on Friday morning.

"There was a real feeling that the UK had 'pulled it off' in a big way. Specific comments related to the quality of the organisation, and the way in which everything ran to time, including the papers. (Briefings to presenters and chairs certainly clearly had an impact.) It is clear that Cass and her team, and members of the UK Organising committee, served us very well indeed. There was praise too for the quality of the technical programme, which must again reflect well on Allen's efforts.

<snip>

"On a purely personal level, I was immensely proud to have been associated with event. Everything, from the quality of British public speaking to the charm and character of Brighton itself, added to the feeling of a

'class event'. Above all, the technical quality of INCOSE has been raised a notch, and its reputation enhanced."

From a message sent to the BoD:

"May I add my thanks to the many I am sure you have already received for a splendidly managed conference."

Membership Subscriptions

Membership Subscriptions are now due for the year June 1st 1999 to 31 May 2000. Please return the renewal reminder which you should have received last month together with a cheque for £50.00 to John Mead. Alternatively just the cheque with your name and membership number.

So What Did Everyone Else Think Of It?

Thank you to those that completed the questionnaires distributed at the Symposium. They are undergoing detailed analysis and appropriate comments will be extracted to feed into the team doing next year's event.

I have had a quick perusal and provide an overview below. It is not unusual in this exercise to see that one sheet says "Excellent" and the next says "Inadequate" about the same item, and this event was no exception.

Every one said that the symposium was adequately publicised, although none admitted to having seen a Poster, which is not really surprising as they had a rather limited circulation. It is a pity that we could not ask those that did not come whether they thought that it was well publicised.

The questionnaire left a bit to be desired under the topic "About the Symposium in General" because it had columns to tick labelled "About right" and "OK" but not for less than all right ("Too few", "Too small" etc). Virtually all respondents went for either "OK" or "All Right" for length of symposium, length of sessions, and number of sessions but there were some "Too Many" on numbers of tracks.

On the question of "How did you find the symposium facilities" there were two for "Adequate", two for "Inadequate", and the rest were "Excellent".

The view generally was that there was enough free time and time to see the exhibits - although even here there was the odd dissenter.

The AV/IT facilities were generally approved of although there were clearly some that had problems. The fast response of the technical support team was complimented.

Clear leader in the popularity stakes was Paper Presentations, closely followed by Panels. The plenary Sessions and exhibition were neck and neck for third place.

Every single respondent thought that it was good value and what is also good news, all but one intends to attend next year.

All that replied to the question "What items could be removed in future to bring the Registration cost down" suggested the paper copy of the proceedings.

I will not bore you with detail but pick a few choice phrases from the comments and suggestions:

- "Superb job - Great planning and facilities"
- "They were too efficient at clearing away the lunch time refreshments"
- "Please shorten the walk between different session rooms" etc. (Seems like a hotel redesign is needed - but we thought you might like the exercise)

I wish that I could read the suggestion for a future keynote speaker.

There was only one paper report which came to me - which is a pity because it was rather good. The marks were on the final plenary session and it was scored 10 out of 10 for clarity of speaking, 10/10 for effective use of Visual aids. For format of presentation it was 20 out of 20. Not bad so far. Then 20/20 for overall clarity of presentation, and time keeping, and the question and answer session.

If it had not been signed I would have suspected that Peter Robson might have completed it himself!

John Mead

INCOSE '99 Academic Workshop

Forty delegates attended the Academic Workshop hosted by the University of Sussex on Monday June 7, 1999. The workshop, which strongly supported the Symposium theme "Sharing the Future", was split into 3 main sessions:

- Teaching & Learning
- Researching
- Applying

Presentations were given by nine speakers drawn from Industry, Academe and the UK Research funding body (EPSRC).

In the morning topics included how systems engineering is taught and best practice introduced into UK industry. UK systems engineering courses and accreditation and the US Licensing approach were also covered, and a discussion session was ably led by Prof. Heinz Stoewer.

The afternoon session, moderated by Eric Honour, heard about the UK Systems Integration Initiative. This will fund

major systems engineering research projects (www.ideo.co.uk/epsrc/sii), interdisciplinary research centres. Finally, on the "Applying" topic, the role that systems engineering has to play in e-commerce and global informatics was discussed.

The feedback from the workshop was very positive and, coupled with the success of a similar workshop last year at Vancouver, suggests that there is a need for this type of forum at future Symposia.

As Prof. John Boardman reported at the closing Plenary session, there were a number of key learning points which emerged from the day:

- Wrestling with Team Working
- Collaborative R&D
- SE underpins e-commerce
- Multi/cultural/lingual/jurisdiction requirements of e-commerce
- The need for soft systems engineering.

Mike Rose

Making an Exhibition of Themselves

We were very pleased with the support that we received from exhibitors. Filling all three halls was seen as optimistic initially, but in the end all fifty stands were occupied.

John Herriot and Jane Smith (who was taken ill and unable to stay the course, but better now I hear), ably assisted by Paul Hewitt, were kept busy throughout. Our volunteer from 3SL, Ian Brogan, who also did the Tannoy announcements from his tower, controlled security.

Exhibitors were given a single sheet form to respond with their comments on a number of aspects and I have conducted a quick review of those received back.

Exhibitors were particularly pleased with the amount of space provided, the opportunity to network with many interested people and the contribution made to this by the co-location of the Ice Breaker Reception and all the food and beverage facilities.

Complaints tended to relate to food supply or, for those near the loading bays, to the temperature. I have to admit that even when the heating was fully wound up it was not the place to stand still for too long. QSS did their best to provide warm clothing, but presumably this could not be worn by all.

My own experience was that food, and seating, were available somewhere in the hall if you moved around and looked for it. If everyone else chose the same feeding station as yourself you clearly felt hard done by.

An area of confusion seems to have been the entitlements of exhibitors to proceedings on CD ROM etc. This caused some friction at Registration. The procedure here was that it was the organisation that booked the exhibition, not individuals, and the lunches, CDs, etc were allocated per organisation and left to their contact person to resolve how they were distributed. I am not aware of the detailed problems, but the number of sets of CDROMS, and lunches per exhibition stand, for example, were deliberately limited. This was to control costs and remove the probability of running out if they were handed out to everyone that asked for them. Some companies did have large teams and were unable to give exact numbers or lists of attendees before the event. If any company did not get a set of the proceedings on CDROM please let me know.

As far as food for exhibitors was concerned there were other feeding facilities within the hotel which were open all the time. There were also some very good ones just outside the front door where one could fill in some of those quiet periods between conference breaks. The expectation was that exhibitors would want to avail themselves of these during quiet spells, and not to try to lunch at the same time as everyone else.

All points made will be noted and acted upon in future events.

John Mead

European Adventure

With a great deal of juggling skill we managed to have a first European meeting during the Brighton event.

This was attended by:

- Prof. Heinz Stoewer - long time INCOSE member, and Member of the Tech Board
- Fariba Hozhabrafkan - Board of Directors Region 3
- Terje Fossnes from Norway - Terje is recently appointed to BOD for Region 3
- Wim Van Leeuwen - President of the Netherlands Chapter
- Cheryl Atkinson - Immediate past President of the Netherlands Chapter
- Cecilia Haskins - President of the Norwegian chapter (and recently appointed Co Chair of the Chapters Committee)
- Ralf Hartmann - President INCOSE Germany
- Tom Strandberg - Leader of emerging Chapter in Sweden
- John Mead - UK Administrator.

The Main topics discussed were:

- Heinz Stoewer's aim to make the Technical Board into a truly international affair with many more international appointments. He will push for anyone

that Europe recommends for appointment.

- The establishment of a European reflector which Fariba volunteered to establish through the main board.

- Each Chapter to nominate their delegate/s although it was expected to be (in INCOSE hierarchy terms) Chapter President, I.P President or President Elect.

- A programme of regional meetings which would be held at European events. The next meeting would be at the UK Autumn event in November. Looking for Quality time.

- A multi Lingual web page was also proposed but I suspect that it did not get a sponsor.

- Bi-monthly Chapter Presidents teleconference which would be set to operate at 4pm Central European time, in English. This will be established by communication via the reflector and initiated by Terje.

- The Agenda for Teleconferences and the UK meeting would be established via the reflector.

- Expectation that France was about to become a full Chapter but not quite.

John Mead

Tutorials and Web Site

There was singing in the bar. We think it was the fat lady and we hope it's all over now. The last week has been spent getting back to "normal" after the exertions of assisting with the organisation of the symposium.

The one day tutorial programme has, over the years, become a very important part of the symposium. This year it was the widest, longest and largest. There were 18 tutorials spread over two half-days and one full-day, with a total of 395 registered attendees.

Analysis of the feedback forms indicated that 90% would recommend the tutorial that they attended for next year. The highest rated tutorials in terms of content, presenter, handouts and value were:

- Kerinia Cusick's "Basics of the EIA Systems Engineering Capability Model"

- Ivy Hook's "Writing Good Requirements"

followed very closely by:

- Linda Abrahim's "Integrated Process Improvement using the FAA Integrated CMM"

- Jerome Lake's "Processes for Engineering Systems based on Standards and Guides"

Whilst the symposium was on-going, work on the web-site (www.incose.org.uk/incose99/) was suspended. The site went live on March 1st and has received over 3,800

"hits". It is now undergoing a metamorphosis from an impending event to post symposium site.

It is intended to upload reviews, slide presentations and photos of the event to the web site. If you would like your slides uploaded or have any other inputs please e-mail them to me. It is not intended to update the site after July.

Stuart Cornes

Tutorial Chair and Symposium Webmaster. e-mail: stuart.cornes@bae.co.uk.

Views From a First Time Attendee

I've been an INCOSE member for a few years, but this was the first event I'd attended. Having been to a few other trade conferences, my expectations were fairly low. I came away surprised at how the INCOSE '99 conference showed the scope of INCOSE, immersed one in theory and practice, and gave some useful lessons to take home (Does anyone else's arm still ache from carrying two volumes of Proceedings?).

The tutorials were quite good value training. Jeff Grady's whole day on "verification and validation" was particularly interesting. Some of the tutors needed to trim their material to suit their billing, avoiding the temptation to spend too long on their personal definition of "systems engineering". Perhaps papers could be graded "beginner", "intermediate" or "advanced", or list some recommended prior reading.

The quality of the presented papers was variable, ranging from the detailed and thought-provoking, to unabashed plagiarism of government standards! As a gross generalisation, European presentations tended to concentrate on "what is Systems Engineering?" while American ones took "what" for granted, and explored "how?", "how better?", and "what next?" The conference provided a way of learning about subjects related to one's immediate experience. For example, having worked with Yourdon techniques for some time, I learnt a good deal about using object-oriented methods as a complementary technique. The openness of many of the presentations was refreshing, with many world class companies willing to share some of their processes and techniques in detail.

INCOSE Interest Groups and Working Groups are a good way to meet people working in related fields. Sadly, there wasn't enough time allotted to the Groups to spend "quality time" with more than one Group.

The exhibition had a relaxed and friendly atmosphere; it was well suited to swapping "war stories" over coffee. It was very enjoyable wandering around asking "Who are you, and what do you do?". The Marconi stand was particularly well stocked with examples of process as well as products.

INCOSE '99 opened my eyes to what INCOSE has to offer. It provided a useful benchmark of world class SE processes and practices. The quality and detail of the papers provides a route map to some of those world class standards. The organisers can be justly proud of their achievements. INCOSE 2000 has a class act to follow.

Jon Roach

Statistically Speaking

To the best of our knowledge the highest number of countries represented at the International Symposium has been 14 at the one in Vancouver. It should not be a surprise that there were more at Brighton, but the geographical spread of the 20 countries represented was very wide. The official statistics of delegates is listed below.

Countries Represented: 20

Registrants per Country:

•	Australia	26
•	Belgium	1
•	Brazil	2
•	Canada	6
•	China	1
•	Denmark	1
•	Finland	6
•	France	32
•	Germany	25
•	Israel	12
•	Italy	5
•	Korea	1
•	Netherlands	14
•	Norway	12
•	South Africa	1
•	Spain	2
•	Sweden	15
•	Switzerland	2
•	UK	266
•	USA	283

Total Registrants   713

With 201 Exhibitors and 1 Press:

Grand Total of Attendees: 915

To show the effectiveness of holding the event in the UK to the spread of INCOSE internationally the non-US attendance figures for the last three years are:

•	1997 LA	87
•	1998 Vancouver	194
•	1999 Brighton	430

John Mead

Local Meetings

We have indicated in previous newsletters the intention to have meetings around the country and that the UK Chapter would provide as much support as was practicable. However we do need to find at least one willing volunteer or company who can do the local arranging. We have done one or two with an organisation that already has an established local presence, namely the IEE, and this can be tried again.

We have found that the most successful approach is to find a local champion and sympathetic employer to help get a local group established in its own right. We had a successful launch of the group in Bristol earlier in the year with 80 attending an evening event, and they are planning more. I asked the leader of the group Chris Davies of BAe Airbus for an update on their plans, and print his response below:

"A rapid update to catch the newsletter, more detailed notes will follow in day or two. Nine of those who volunteered to help after the very successful first meeting (at Bristol) met as a team again tonight to map out our shared vision for a local group and how we plan to make that a reality. We believe we will have three meetings a year, the next being in October. Those present divided up the responsibilities between them and are now approaching potential speakers and looking for suitable venues before finalising the theme and date. We expect to finalise this when the team meets again on 19th July (Quintec have kindly agreed to host the next team meeting).

"We would still like more local companies or organisations to contribute their own ideas to shape how we move forward so that our local group really does serve the needs of local systems engineers. Contact christopher.davies@bae.co.uk or Jane Smith at Quintec for more information."

Chris Davies

So, if you are in the Bristol area, please contact Chris, just to let him know that you are interested, and especially if you are willing to do a little organisation.

If you are anywhere else please contact me, John Mead, and we will investigate the potential for your area together.

John Mead

Contact Details

Editor of the INCOSE UK Newsletter

Pete Lister   Aerosystems International Ltd
West Hendford
Yeovil, BA20 2AL

Phone: 01935 443000
Fax: 01935 443111
e-mail: pete.lister@aeroint.com, or
pete@lister.globalnet.co.uk

The INCOSE UK Administrator

John Mead   20 Beehive Lane
Binfield
Berks, RG12 8TU

Phone: 01344 422325
Fax: 01344 481035
e-mail: jdmead.a0030182@infotrade.co.uk

Chairman of the SEPDC

Mike Prince   BAe Defence Systems
Grange Road
Christchurch
Dorset, BH23 4JE

Phone: 01202 404840
e-mail: michael.prince@baedsl.co.uk

Chair of the INCOSE '99 Committee

Peter Robson

e-mail: peter.robson@baedsl.co.uk, and
peter@robsonpg.demon.co.uk