

Bulletin - Newsletter

Cosmonotes

Canadian Alumni of the International Space University

Association des anciens étudiants canadiens de l'Université internationale de l'espace

April – Avril 2002

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Cosmonotes

The Cosmonotes is the official newsletter of the Canadian Alumni of the International Space University Association (CAISU).

<u>CAISU</u>

The purposes of CAISU are:

To provide for the promotional and preservation of contacts between all Canadian alumni of the International Space University;

To inform any interested party in Canada about the affairs of the International Space University;

To co-operate with other interested organizations in Canada in promoting the cause of peaceful space activities;

To represent the members when dealing with various institutions of the International Space University and its representatives;

To organize various activities and act in such a way as to fulfill the above objectives;

To advance and promote space education and space research in Canada.

<u>INFO</u>

Cosmonotes director:

Richard Giroux, SSP'01 Vice-president, CAISU rgiroux@ele.etsmtl.ca

President' Message

By Larry Reeves, MSS 2, CAISU President

Welcome to my first-ever President's report! I have a variety of topics to talk about, which I hope will be of interest to you all. So, here goes ...

Post-Election Thoughts

First of all, on behalf of everyone, I'd like to extend huge thanks to Chantal for all of the extensive work she has done for CAISU in the past year. It was because of the obviously big time commitment she gave to keeping CAISU members informed and well-represented, that I was somewhat hesitant to take on the role; however, I'd once again like to say that it is a honour to be able to represent such a amazingly energetic group of space professionals and enthusiasts as the Canadian ISU alumni are, and I will do what I can to ensure that CAISU remains a well-respected voice for space education in Canada.

Also, I'd like to welcome the other Executive members:

-Vice President: Richard Giroux SSP01

-Secretary: Eric Choi SSP99

-Treasurer: Leila Kheradpir MSS6

-CFISU Liaison: David Phillips MSS6

-Membership: Valery Tessier MSS5

-Webmaster: Simon Kruijen MSS5

-Regional Director 1: Jonathan Knaul SSP98

-Regional Director 2: Joan Saary SSP01

CAISU Plans for the Year

The new executive has started the year with a lot of energy and activity. I think that they will be a great crew to work with, and together we will have some very rewarding experiences and accomplishments. We already have some excellent plans underway, and I hope that all CAISU members will get involved if they can. One of the most significant events of the year will be the CAISU Day at the CASI ASTRO conference in November. We've already begun to prepare the theme and the presentations; however, since VP Richard is in charge of the planning, I'll let him discuss things in greater detail.

Another goal I have set is to get Revenue Canada to allow MSS students to be able to deduct their tuition on their annual income tax return. There seems to be quite a bit of inconsistency across the country – some people have had no problem, some have been successful after much arguing, and some are currently on the losing side of the battle. Certainly if the MSS gets full accreditation in France, that would probably solve the problem, but I want to ensure that no one has to go through the same troubles several MSS alumni have had.

Finally, I want to remind everyone of one of CAISU's main objectives: to advance space education in Canada. We will continue to do so this year most notably through the CAISU Day and the ISU Roadshow, but also through such initiatives at the History of Space project. But, I would also encourage everyone to think about something they can do on their own e.g., visit a school and talk about something space-related (such as your job or research). Having done several school and public presentations, it's very apparent that everyone is interested in space, in what Canada has accomplished in space, and (for what opportunities are students) available to them for space-related careers. Come on, people! If we can't tell them, who can??

SSP Update

I sent out a report immediately following the site visit, but will briefly summarise it here. Erik Slachmuylders, Interim SSP Director, and Mathieu Gruber, SSP Logistics co-ordinator, visited Vancouver at the end of January. It was cold & raining Thursday, but Friday it cleared up, and offered some gorgeous views of the snow-covered mountains. Even living here, I still find such a winter's view absolutely breathtaking.

On the UBC campus, we toured various UBC labs, potential offices, classrooms, and computer labs. By far the best venue will be the Forestry Sciences Centre – new and spacious, it has all academic facilities under one roof, and is within 200 metres of the designated student housing.

We also visited the Pacific Space Centre, and capped off the two days with a visit to Vancouver City Hall to meet with Councillor Sam Sullivan, brother of Pat Sullivan (SSP 93), and Vancouver Mayor Philip Owen. It was a very interesting meeting: the Mayor was wearing a suit and hiking boots – he had just returned from Whistler and the official Winter Olympics bid announcement.

As most of you know, our competitor for 2004 is Adelaide, Australia. I understand that they have an excellent proposal, and they started preparing long before Vancouver did. I do believe, though, that we showed that UBC has complete and excellent facilities, and that an SSP in Vancouver will have significant support from UBC, MDA, many companies and researchers in unique space-related aspects, and, of course, the Canadian ISU community.

We were expecting a decision by the end of February; unfortunately, the ISU Board of Trustees had some follow-up questions, and has sent the two proposals to the Academic Council for consideration and recommendation, which will come back to the Board of Trustees for a final decision at the end of April. Until then, all we can do is wait (im)patiently.

(continued next page)

President' Message (continued)

RADARSAT-2 Report

Just a few quick notes about the RADARSAT-2 programme. Just before Christmas, we had the Bus CDR. By the time this edition of Cosmonotes is released, we will have completed the Payload CDR. Let the building begin!!

As far as launch goes, we're still well ahead of schedule. At the beginning of February I attended the PAF CDR at Boeing's Huntington Beach plant. RADARSAT-2 will be using an Arianestyle 1194 PAF; the cone-shaped sections were actually machined at a company in the Vancouver area, only a 15-minute drive from MDA.

After the Boeing meetings, I drove up the California coast to Santa Barbara

and Vandenberg. An Iridium launch was scheduled, and I was hoping to redeem myself for my failed photographic foray at the previous launch I attended (for those of you who don't know what I'm talking about, have a look at the April 2000 edition of Cosmonotes): unfortunately, they had a large wind gust at L-50 seconds which caused a hold. With only a 5-second window, the launch was guickly scrubbed for the day, and I had to return that evening. Sigh. Oh well, it was pretty foggy at the launch site, so my video probably wouldn't have shown much, even if it were pointed in the right direction.

To make up for the cancelled launch, the weather was beautiful and warm (a treat in early February, even for a Vancouverite), and the drive along the coast was spectacular, Beach Boys CD blasting away, me failing miserably at singing falsetto. Uh, too much information?

Summary

I think I've talked for far too long. Thanks to everyone who is still reading. I hope you'll all keep in touch, through e-mail or articles to Cosmonotes. Again, I look forward to working with everyone this year, and continuing to promote CAISU and space awareness in Canada.

Salut!

Space Applications for Heritage Conservation conference

ISU is hosting the "Space Applications for Heritage Conservation" conference, organized with EURISY, UNESCO in the World Heritage city of Strasbourg. This international conference will be held 5-8 November 2002 at ISU's new Central Campus in Strasbourg.

As part of the celebrations commemorating the 30th Anniversary of the UNESCO World Heritage Convention, the conference will examine the applications of remote sensing as a means to identify and monitor natural and cultural sites from space and to study the downstream educational potential. Check out the ISU Website (http://www.isunet.edu) for more information.

From the ISU Head Quarters

By Claude Rousseau, MSS 4

The 6th International Symposium "Propulsion for Space Transportation of the 21st Century"

The ISU, in conjunction with the 6th International Symposium "Propulsion for Space Transportation of the XXI st Century" to be held at Versailles, France, from 14 to 17 May 2002, organizes 7 Shorts Courses on the theme "Space Propulsion: from Fundamentals to Applications". The courses will be held Monday, 13 May 2002. ISU Alumni can register for a reduced rate of 100 Euros4. The topics to be covered in parallell sessions will be:

1.Launchers	3.Solid Propulsion	5.Combined Propulsion
2.Liquid Propulsion	4.Electric Propulsion	6.Nuclear Propulsion

7.Advanced Propulsion

A Plenary Introduction Session chaired by Pr. Nikolaï Tolyarenko, ISU Faculty and MSS Director will cover Fundamentals of Propulsion, Potential modes of Propulsion, Space Applications, Milestones, Challenges and Future Perspectives. Experts from industry, agencies and academia will chair and provides lectures for the seven parallel sessions.

Registration fees* : 250 Euros (350 Euros after April 30, 2002) and a special registration fee of 100 Euros applies to students and ISU Alumni.

*The Registration fee covers: Access to the ISU Short Courses, lunches and refreshments on the day of the courses and a copy of the course handouts.

For more information or to register, visit the following website: http://www.isunet.edu/other_programs/short_programs.htm

MBS goes for launch !

By Kamran Bahrami, MSS 5

Canada's next contribution to the International Space Station (ISS) program is almost ready to be launched into orbit.

The Canadian portion of the ISS involves an advanced robotic manipulator system termed the Mobile Servicing System (MSS). It is composed of four components: the Robotic Workstations (RWSs), the Space Station Remote Manipulator System (SSRMS) a.k.a. Canadarm2, the Mobile Remote Servicer Base System (MBS), and the Special Purpose Dexterous Manipulator (SPDM). Already in orbit are the RWSs and the SSRMS. The MBS is scheduled for launch on ISS mission UF-2 (shuttle mission STS-111) currently scheduled for the month of May 2002. The SPDM will be the final component to be installed and currently is scheduled for launch in 2005.

The MBS is an aluminum structure mounted on the Mobile Transporter (MT) which in turn is attached to rails on the truss of the ISS. The MT can move along these rails to various locations on the truss, transporting the MBS and any hardware attached to it along. The MBS serves as a storage location and a work platform for astronauts. It is equipped with four Power Data Grapple Fixtures (PDGFs) and a Payload & ORU (Orbital Replaceable Unit) Accommodation (POA - based on Latching End Effector of SSRMS) to hold payloads. The MBS also provides an MBS Common Attach System (MCAS) to accommodate payload transportation and servicing, and provides structural and electrical interfaces to users. The MBS allows the SSRMS and the SPDM to operate from its four PDGFs. This allows these units to be transported to all areas of the ISS accessible from the truss. As well, the POA and MCAS allow payloads to be attached to the MBS for transport. Another feature of the MBS is that the POA and various electronic boxes can serve as ORU spares for the SSRMS.





MBS goes for launch ! (continued)

One of the benefits of working at MD Robotics' MSS Systems group has been to be involved with the Integration and Test (I&T) Team for the MBS. I was part of a small team sent to Kennedy Space Center in Florida in order to perform Launch Configuration and Test activities on the MBS in order to prepare it for launch on the STS-111 mission in May 2002. The team spent time performing a variety of tasks ranging from extensive testing of the video systems to cleaning the structure of the MBS. This was truly an interdisciplinary opportunity and the ISU attitude towards this variation of tasks was very beneficial. My professional education is in mechanical engineering yet for this I&T work much electrical engineering knowledge was necessary. It became necessary to take a new point of view with respect to the work I was performing in order to be able to complete the tasks at hand. At the same time, though, I was given tasks that required my mechanical engineering skills. The ability to multi-task work from different disciplines is a requirement of not only systems engineering personnel but also ISU alumni. The ISU experience allowed me to be very comfortable with this work approach.

I was also able to gain access to space hardware that I had spent much time reading about in documentation or viewing through images. I gained a new level of respect for the impressive nature of the hardware and the intricacies of its design became much more apparent to me. This intimate contact was an experience that I feel all people involved with this type of work could benefit from, especially for hardware that will not return to the Earth once it has been launched.

This experience has been one of the most gratifying of my career in the space industry. I believe that I have not only gained knowledge in an engineering sense, but also in the romantic element of our work. To be working in a place where history was made and history is in the making is a very emotional and inspirational to me. Many of us become so focussed in our work we forget what we are actually a part of. Many of us lose the inspiration that once propelled us into this field. It is important to touch base with this feeling and harness it. It can do wonders for us.



L'École pilote d'essais en France

By Jonathan Knaul, SSP98, CAISU Regional director 1

Bonjour à tous mes amis de CAISU. Je vous écris de Marseilles, France, où je demeure cette année, et où j'assiste à la formation de pilote d'essais.

La dernière fois que j'ai écrit pour Cosmonotes, j'étais au Kosovo où je pilotais pour les Forces armées canadiennes afin de maintenir la paix après le bombardement d'OTAN en 1999. Je suis content de vous écrire d'un endroit plus tranquille et sécuritaire.

J'habite vraiment à St. Mitre les Remparts - 45 minutes du centre-ville de Marseilles. L'école de pilote d'essais, appelée École personnel navigants essais et réception (EPNER), est situé sur la base aérienne d'Istres, également 45 minutes du centre-ville de Marseilles. Il n'y a que quatre écoles de pilote d'essais au monde occidental - il y a le fameux USAF Test Pilot School à Edwards, en Californie, le USN Test Pilot School à Pax River, au Maryland, le Empire Test Pilot School à Boscombe Down, au Royaume Uni, et EPNER.

Je suis stagiaire pilote d'essais pendant un an. La formation a commencé au début de septembre, 2001, et la remise des diplômes est prévue pour la mi-juillet, 2002. La vie comme pilote d'essais (même stagiaire) est magnifique et aventureuse - depuis septembre, j'ai touché déjà 9 appareils différents. J'ai piloté dans les montagnes des Pyranées, et j'ai passé une semaine à Munich en effectuant des essais sur deux hélicoptères d'Allemagne. Je passerai une semaine à Ottawa au Conseil national de recherche du Canada, une autre semaine en Suisse chez Brietling, et il y a des essais prévus en Angleterre, et aussi en Afrique du Sud.

Les journées sont très longues et l'aventure arrive avec son prix. Normalement, la journée débute à 08h00 avec des séances et lectures. Les vols consomment l'après-midi. Pour chaque heure de vol, il y a en moyenne quatre heures de préparation avant, avec un briefing qui dure à peu près une heure. Après le vol et débriefing, faire il faut un dépouillement des paramètres relevés lors du vol, suivi d'un rapport et d'une présentation.

Il y aussi un examen chaque semaine, soit écrit ou oral, de type méchanique-duvol, fonctionnement des turbos moteurs, etc. Les essais que nous effectuons sont des essais qui ouvrent des domaines nouveaux et qui touchent les limites des appareils. Le métier d'un pilote d'essais n'est pas toujours l'approche du type "cowboy" comme décrit par Tom Wolfe dans son roman, "The Right Stuff" - tous les risques sont calculés avant le vol. Cependant, c'est un type de pilotage forcément dynamique et extraordinaire.

Après la graduation, je serai transféré à Cold Lake, en Alberta, où j'occuperai une position de pilote d'essais pour les Forces armées canadiennes.

Concernant CAISU: J'aimerais vous remercier de m'avoir élu au conseil des directeurs de CAISU pour l'année 2002. J'ai rendu visite en janvier aux stagiaires canadiens du MSS à Strasbourg avec Marcus Dejmek (SSP '97, TA '98). Nous avons plusieurs projets planifiés pour cette année et j'ai hâte de vous voir lors de mon retour au Canada et à la conférence de CAISU à Ottawa en novembre.

Alors...meilleurs vœux de moi en France. Je vous souhaite une très bonne année 2002, et que vous atteignez tous ce que vous espérez.

History of Space Exploration Site on the Web!

By Thierry Fontaine, SSP99

I would like to take the opportunity given by the Cosmonautes to announce that a preliminary web site about the "History of Space Exploration" is now accessible online through the CAISU homepage (www.caisu.ca) at the following address: http://www.caisu.ca/html/space_history.html.

The site presents a broad chronological overview of the prerequisites that lead human kind to access space, starting all the way down from the Earth formation and birth of life up to the current space age. In a nutshell, the site wraps up all the information relevant to understand the steps that lead the

human into space: human and civilizations evolution, technological innovations, scientific advancements, historical milestones, and key individuals that paved the way to the space era.Note that a more detailed and interactive version of the site is being planned. Meanwhile your comments and/or contribution for improving the site are most welcome. I would also like to give credit to Alain Poirier, developer of the site content and our CAISU Webmaster, Simon Kruijen, for his technical support. For any question, contact Thierry Fontaine (project lead) please at fontainet@hotmail.com and go visit the site!

SPACEJOBS Partnership with ISU

ISU is providing a new service for ISU alumni over the world. Under a partnership with SPACEJOBS, a pioneer in Internet recruiting, ISU alumni will have easy access the best jobs in the aerospace sector, and aerospace companies will have easy access to the future leaders of this sector – ISU alumni.

SPACEJOBS is an aerospace-focused Internet "job board" that provides the opportunity for job-seekers to post their resumes and for companies to advertise job openings. The recently re-launched Website of the Canadian company includes a searchable resume database, and comprehensive candidate and recruiter management tools.

At the SPACEJOBS Website, aerospace companies advertise hundreds of career opportunities, and thousands of space professionals post their resumes. Since its establishment in 1996 by ISU SSP91 alumni John Criswick, Doug Messier and Sebastien Drouin, SPACEJOBS has connected industry professionals with employment opportunities around the world. Over 50,000 visitors a month come to the SPACEJOBS Website to seek potential employees, to find the latest employment opportunities, and to review information from the aerospace, space and defense sectors.

Under the Memorandum of Understanding, which was signed in December, SPACEJOBS will highlight ISU alumni resumes on its Website to make it clear that having gone to ISU is a benefit to future employers. SPACEJOBS will also promote ISU programs and alumni via articles on their Website and elsewhere.

So, those of you who are hunting for jobs . . . post your resumes (indicating your ISU connections)! And those of you who are hunting for employees . . . post your job openings and check out those resumes!

The SPACEJOBS Website is http://www.spacejobs.com.

First Announcement: Space Generation Summit

October 11-13th 2002, Houston, Texas, USA

The Space Generation Summit is a two-and-a-half-day meeting that will gather 200 young international delegates to refine and articulate a youth vision on the future of space activities. It will be held in conjunction with the World Space Congress - the largest gathering of space scientists within the last decade - and will build on the work of the Space Generation Forum of the Third UN Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).

Delegates will be selected several months prior to the meeting, and will work together on-line in the months preceding the summit to create the Summit program, and to draft Summit documents. The intentions of the SGS are to take full advantage of the unique opportunities that World Space

Congress offers, and to communicate an overall vision for accelerating our pace in space. If you are interested in attending, are between the ages of 18 and 35, and are a space enthusiast, we encourage you to apply.

Deadline for application: April 30th, 2002

The Summit is facilitated by the Space Generation Advisory Council - the body through which student and young professional views are brought to the United Nation's Committee on the Peaceful Uses of Outer Space. The SGS builds on the success of the Space Generation Forum that was held as part of UNISPACE III in July 1999.

For more information, please refer to our web site at http://unsgac.org/sgs

or email sgsinfo@space-generation.org

A special thank you

By Valery Tessier, MSS 5, CAISU Membership

To follow on Larry's note about the SSP, I would like to take the opportunity to thank all the alumni who have contributed in the effort for bringing the SSP back to Canada. A special thank you goes Noemi Nagy (SSP-93) for her dedicated work on the project. Thank you also to the CAISU BOD 2001 for their continuous support and alumni who have work on putting together preliminary proposals for the BOD to review. At last, thank you to David Kendal for his time, support and guidance.

SSP project activities were passed on to Larry Reeves (MSS-1), CAISU president, when CAISU BOD transitioned last January. Please contact Larry for any questions regarding the SSP activities.

CAISU visit to the MSS class of 2002

By Mark Dejmek, SSP'97 and Jonathan Knaul, SSP'98

January 26-27, 2002

Under Strasbourg-style weather, helico-jock Jonathan Knaul and microgravity-mad Mark Dejmek met at Chateau Ibis in fine French style, very relaxed and arguably prepared for a CAISU presentation to the newest members of the CAISU family – the Canuks at MSS02. It was to be the most memorable weekend since the ISU Alumni gathering in Bremen last summer.

In contrast to past CAISU presentations held in hotel lobbies or meeting rooms, we met a group of Canadians at Ye Old-Town English Pub, complete with smoke, loud music, dim lighting, and Canadian bartenders. After having (a) invited all clients to clear the premises, (b) cleared the smoke with Jon's make-shift helico-blades, and (c) toned the music down to below the 120 dB level, a Mac portable computer was installed on a stand-up bar table and took center stage. The CAISU presentation outline was similar to that used at the 2001 AGM in Toronto and so we won't get into the details of it here. Rest assured it was comprehensive, clear, concise, and well received.

That evening, we all managed to enjoy a formal social gala by piling into what was the joint ISU-and-other-students-from-ULP-and-elsewhere Formal Graduation Ball. After posing for a few paparazzi shots and shortly upon entry, Jonathan became the charming finger-food server and Mark the dangerous champagne server. Dinner was served and many simply couldn't eat only one of those tasty French deserts! The evening was now only beginning as the hall was transformed into a karaoke bar complete with stage, dancing girls, male dancers, and singers. The French haut couturier did a fantastic job at changing the costumes throughout the evening: from African dancing birds of prey, to skin-tight leather biker and bikini gear, to mediaeval and renaissance European dress for both men and women. Quite impressive! Dancing le French Rock was equally full of energy and surprise, especially for women who had strapless dresses frequently drop below the North American safety level while their partners would lead and/or maneuver them a particular way and/or direction. Where did those extra champagne bottles go? You know, the ones we hid?

Meanwhile, downstairs there were at least four "bars a theme" running until the wee hours of the morning. The wonderful yet expected surprise on the disco/techno dance floor (filled of course with classic people making elusive yet seductive moves over each other) was to watch – ok perhaps "watch" is not the word. Let's use "lead" – lead-on our quiet, humble, and sincere Canadian/Chinese ISU student and father of two become the center of attention amongst the twenty-something crowd. Whoever said the unique combination of ISU and alcohol couldn't change a personality? After walking two beautiful Canadians home, the evening concluded by drinking lots and lots of water for potentially embarrassing reasons that we'll get into once we all see each other again in the near future.

Many of us have put forward suggestions as to how to improve the MSS program on various fronts over the past few years. For many, the comparison between the MSS and the SSP is unavoidable. From the comments that we received throughout the evening from Canadian and other students, potential solutions for increasing the cohesiveness of the MSS experience lie in organizing group evening dinners and centralized lodging for the students. Even though the current students find lodging for themselves somewhere in town, it is vitally important for ISU to organize centralized lodging for everyone prior to their arrival. The key issue is to ensure that all students live together in the same building. Whether it's in Strasbourg downtown or closer to the ISU campus is secondary. What's paramount is for everyone to have the same experience and opportunity to be together and build cohesiveness as a unit. This would then facilitate having common dinners among many, and the SSP comparison would be one step closer to being diluted.

Mark and Jonathan sign off, still from within France, with a warm thank you to CAISU for this memorable Strasbourg moment. If any of you out there in CAISU-land have any questions or comments, please feel free to contact either of us through the caisu-alumni mail list. We'll ship you the presentation if you request it. We look forward to hearing from you. A well documented and frequently admitted feeling after any ISU experience is the human inability to say goodbye without emotion and sorrow. We leave you with this unfortunate reality as you breeze through this edition of Cosmonotes, knowing very well that there are many bright days in sight as we plan our next memorable activities together.

A la prochaine!

News from MSS 2002 Canadian students

The Cosmonotes is a great opportunity to introduce the new members of our extended family. This year, 6 Canadians are currently attending the MSS: Tibor Balint, Chantal Legault, Nancy Martineau, Desiderio Magtanggol Reyes, Michael Simpkin and Ward Thomson. Students are currently on placement. Read what some of them will be doing.

Tibor Balint

Tibor Balint from Toronto, obtained an MSc degree from the Technical University of Budapest, Hungary, an MPhil from the University of Exeter, UK, and a PhD from the University of Warwick, UK, in various fields of Engineering. He also worked for many years at Ontario Hydro, as a nuclear design engineer, performing thermalhydraulic analyses. His ISU-MSS Module 4 placement project at NASA's Jet Propulsion Laboratory explores the use of Commercial Off The Shelf (COTS) Computational Fluid Dynamics (CFD) tools to enhance the concurrent design environment, which will benefit future Mars Lander missions.

Nancy Martineau

Nancy Martineau (Montreal) is carrying out her placement at the Canada Centre for Remote Sensing in Ottawa, Ontario. The project under study is concerned with the applications of radar and hyperspectral remote sensing techniques. Radar imaging is an effective tool for the extraction of geological information, unrestricted by external illumination conditions. Hyperspectral imaging is a powerful and versatile means for continuous sampling of narrow intervals of the spectrum. In recent years, hyperspectral imaging has provided a new tool for environmental monitoring and resources mapping.

Chantal Legault

CANBERRA, AUS - This Canadian girl has done a lot of studying/travelling in the past year, going from: Bremen GERMANY with the SSP, to the Space Centre in Kourou FRENCH GUIANA, to the MSS in Strasbourg FRANCE and finally to the land down under, in Canberra AUSTRALIA. Her placement in Oz is with the Royal Australian Air Force, (Aka RAAF) writing a paper comparing Unmanned Aerial Vehicles and satellites in a disaster management setting. She is looking forward to scuba diving in the Great Barrier Reef, to meeting kangaroos and koalas up-front and personal, but mostly to returning home to Canada for a well needed break with her family and friends before returning to Strasbourg for the last module of MSS7.

Desiderio Magtanggol Reyes

Greetings of Aloha from Hawaii.

I'm here right now at University of Hawaii at Manoa. Dr. Jim Dator, the Director of Hawaii Research Center for Futures Studies is my mentor.

The project that I will be working on for my placement is that of a concept paper for an International Space Agency. In addition I am also helping out on the undergraduate class of Dr. Jim Dator regarding Political Design of a Governance System for Mars Settlement in the year 2050.

As about me, I was born and grew up in the Philippines. I had my first studies there and took up graduate studies in Remote Sensing and Geographic Information Systems at the University of the Philippines. I have worked as an Information Systems Analyst with the Philippine government national mapping agency and immigrated to Canada in June 1996. Now, I live in Vancouver and sold computers for living before going to ISU.

Where are you ?

By Valery Tessier, MSS 5, CAISU Membership

Every year more and more Canadians participate to either ISU programs. Our family is growing fast and CAISU couldn't be happier for that. On the other end, CAISU has lost track of some Alumni with time. You moved? You have a new email address? A new phone number? Remember to update your contact information at CAISU as well. Help us remind your classmates as well (or let us know where they are hiding!).

Simply send us an email to: valerytessier@hotmail.com

<u>Alumni update</u>				
Christine Marton SSP91	Li-Te Cheng SSP96 ; SSP Staff 97- 00	Michele Shemie SSP94		
In September I started a tenure- track faculty position at the University of British Columbia. I am now residing in Vancouver. My new email address is marton@interchange.ubc.ca	Li-Te is still working for IBM Research in the Boston area. He recently defended his thesis successfully in Newfoundland after being cross-examined by cyborg- extraordinaire, Steve Mann. So, he's finally done with the Ph.D. and is now engaged with fellow Montrealer-in- Boston, Tina Liu.	Michele Shemie (SSP'94) is currently on-site at Dassault-Aviation in Paris. Please send an email if you're in the neighbourhood to: michele.shemie@pwc.ca		

Cosmonotes face-lift !

As you can see, the look of your Cosmonotes has been changed a little bit, and other improvements will come in the next issues. Feel free to comment on what you have liked, and what displeased you.

Any suggestions to improve the content and the way it looks will be gratefully received! Also, I would like to take the opportunity to thank Valery Tessier who taked the lead in collecting the articles for this issue, while I was doing my thesis proposal...

Your Cosmonotes director,

Richard Giroux, SSP'01 CAISU Vice-president rgiroux@ele.etsmtl.ca