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News from

the domain of aviation

www.information.aero

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Welcome

Since the .aero domain was launched in March 2002, we have remained committed to our vision of helping companies, organizations and individuals within the air transport community make the most effective use of this exclusive space within the Internet universe. Our lead story this month reflects our involvement in one of the most exciting areas of development: RFID, the technology that might substantially reduce the incidence of misplaced baggage.

While talking about parts, check out our story 'Spreading the word across North America'. We are busily promoting the domain on the home page of PartsBase.com, the world's largest online aviation market place.

Meanwhile our profile is carefully nurtured by our registrars, the companies authorized to sell .aero domains. This month we start an occasional series, 'Meet the registrars'. Our first interviewee is Hans-Peter Oswald of Secura, our first – and still one of our most active - registrars, based in Germany.

There is plenty else to read in the .aero newsletter, including a brief glance at the origins and work of ICANN, and comments on the role of .aero and its sponsor, SITA, in bridging the digital divide. We hope you enjoy this issue - do get in touch with any comments or suggestions. We'd be delighted to hear from you.

.aero team, SITA



Adding real benefit to the .aero domain

An important part of the work of the .aero team is to help the industry explore and understand some of the innovative thinking that is a continuing feature of the Internet community.

For example, in October last year, .aero chaired a session at the US-based Air Transport

Association's e-business forum to discuss

DNSSec, the technology that adds significant security benefits to the domain name system

(DNS). DNSSec is expected to become a vital Internet security infrastructure component, a cryptographic key management mechanism for a variety of security solutions, for instance, to reduce e-mail spam, and to deploy dynamic virtual private networks. At .aero's invitation, the meeting was addressed by Steve Crocker, chair of ICANN's Security and Stability

Advisory Committee.

Community RFID

In December, the .aero team – jointly with innovation department from SITA – organized a workshop on RFID at the Airports Council

International World Conference. It is becoming increasingly understood that RFID technology can bring substantial benefits to the air transport community — not only in the form of cost reductions, improvements in productivity, customer services and safety — but also as a means of generating new revenues.

The community challenge is how to forge a common approach that resolves the potential conflicts caused by complex technological environments, a multitude of competing (and sometimes redundant) solutions, an accelerating rate of technology change, and concerns of security and compliance.

Spreading the word across North America...

Through June and July, the .aero domain is featuring on the home page of PartsBase.com, the world's largest on-line aviation market place. With a bias towards the massive North American market, the company nevertheless serves 23,000 end-users, representing some 4,500 member companies worldwide.

PartsBase began operating as a division of Aviation Labs in Houston, Texas in 1996, with a view to using Internet technology to streamline business processes for the aviation, aerospace, and defense industries The division was spun off into its own entity, PartsBase Inc. in 1999.

PartsBase.com offers buyers and sellers a database of more than 50 million line items, repair/overhaul capabilities and government logistics search. Users include over 300 airlines, as well as OEMs, distributors, maintenance, repair and overhaul companies, and government contractors.

Meet the registrars – Secura

Ever since the .aero domain was opened for business in March 2002, only members of the aviation community – including airlines, airports, aerospace companies, organizations, associations, government agencies and qualified individuals – have been able to register a .aero name. Those registering for the first time must still obtain a .aero ID before signing up with one of the eleven registrars currently offering the service.



The first of these, and still one of the domain's most active registrars, was Cologne-based Secura GmbH. We spoke to Hans-Peter Oswald, the company's managing director.

You applied for accreditation as a registrar in 2001, while the application for the .aero TLD was still being considered by ICANN. What led you to take the initiative so early on?

"Mankind has been fascinated by flight since the mythological times of Icarus. Even selling a domain connected with air travel connects us to some of that mystery and romance. But perhaps more prosaically, Secura is accredited as a registrar for every generic top level domain. So of course we wanted to add .aero to our list.

We all know that the aero-domain is much more than a domain name – it's an Internet territory staked out by aviation for aviation.

A .aero domain sets a qualified company – or individual – apart from today's crowded online environment and reinforces its identity as a key player in the global aviation community."

Meet the registrars — Secura continued...

Your website reflects your commitment to strong customer service. Have you found that dealing with the .aero domain has involved complexities that you have not faced with other domains? Have you needed to introduce any additional customer service elements to deal with .aero customers?

"As I have explained, we offer .aero domains through our website (www.domainregistry.de) alongside many other domains – and our website is available in 11 languages. So we are used to dealing with people from many countries and many cultures. The world is our market and we aim to satisfy every customer.

However, selling .aero domains is completely different from any other domain. As your readers know, registration in .aero is not available to everyone. Unlike generic TLDs, .aero is only available to valid aviation community members — a process that safeguards .aero's exclusivity and integrity and communicates a unique identity for the company or individual. As a domain managed for the aviation community by the aviation community, registrants are assured that their most important online asset — branding and identity — is in safe hands.

I have no doubt that this level of security and integrity is strongly appreciated by the community – and at the highest level. A number of times I have answered the phone to find the CEO of an air transport global player asking for details about the .aero domain. That level of recognition is central to .aero's future success.

So, as to whether we have had to introduce any extra elements to deal with .aero customers, I would say only that we have had to ensure we understand the benefits of the .aero domain, and that we keep must abreast of the fascinating developments being undertaken by SITA, as sponsors of the domain, in the technical field."



"Unlike generic TLDs, .aero is only available to valid aviation community members — a process that safeguards .aero's exclusivity and integrity and communicates a unique identity for the company or individual."

Hans-Peter Oswald – Secura GmbH,
Managing Director

.aero industry news continued...



"At Secura, we make a point of explaining to our customers the technology projects being undertaken by SITA in support of .aero." Hans-Peter Oswald – Secura GmbH, Managing Director

Given that those who can purchase a .aero name are closely restricted, have you found any particular difficulties in working with .aero customers?

"Our .aero customers are, quite rightly, as demanding as our other customers over what they expect from us. But, whereas a company taking a .com domain regards it simply as a necessary piece of the network infrastructure, more and more .aero customers are recognizing that the domain has a great deal of potential to help them work more effectively and efficiently.

However, because of the restrictions on holding a .aero domain, we have to be more involved with our customers than for other domains. For example, we are the registrar of humor.aero. This is a website run by Martin Leeuwis Publications in the Netherlands, that has been publishing books of aviation humour and cartoons since 1982. On the

other hand, despite the customer's protestations about the importance of competition and choice, we had to refuse to register sex.aero. The customer could not — and probably still does not — understand the importance of the .aero policy!"

Based on your experience, what do you consider the most important issues concerning the development and the future of the .aero domain? How do you see the role of Secura within that?

"At Secura, we make a point of explaining to our customers the technology projects being undertaken by SITA in support of .aero.

For example, back in the year 2000, when the .aero-domain was first proposed, it was considered by some a futuristic idea. But others thought it was totally and utterly crazy to suggest that aircraft engines, seats, spare parts or individual passenger bags could have their own IP addresses or perhaps even a domain name. They could not see how the .aero initiative could provide the "glue" between the aviation industry and the Internet. Nor could they see what we are witnessing today – the fact that soon baggage will be monitored and tracked using RFID and the .aero domain, saving airlines and passengers a lot of trouble and cost over the bags that get lost."

Meet the registrars — Secura continued...

"So I wonder what the doubters would say now?

We already know that that the Airbus A-380 will have passive RFID chips on removable parts such as passenger seats, life vests, and brakes. But how will the mechanic in a remote hangar know what part is tagged and when to replace it? Thanks to the domain name system (DNS), this is where the Internet becomes the Internet of Things, and not just people.

EU Commissioner Viviane Reading said in her speech at the most recent Cebit that "...the innovative marriage of RFID tags, sensors, Galileo, 4G networks, Wi-Fi and artificial intelligence, will create an "intelligent infrastructure" that has the potential to dramatically reduce congestion and pollution, and enhance security, passenger monitoring and comfort."

Thanks to the work done by SITA and the Dot Aero Council, the .aero-domain initiative was created as a place where air transport policy and Internet policy can meet. Over the past five years, we have come to understand the unique experience that SITA has of the needs and structure of communications and IT in the air transport community – and the role it's playing in moving the technology into radical new areas. We're very happy to be playing a part in that process."



"...the innovative marriage of RFID tags, sensors, Galileo, 4G networks, Wi-Fi and artificial intelligence, will create an "intelligent infrastructure" that has the potential to dramatically reduce congestion and pollution, and enhance security, passenger monitoring and comfort."

Viviane Reading - EU Commissioner

The .aero domain just keeps on growing

The following is edited from the section on .aero in the 2006 SITA Annual Report, published in June 2007. The .aero domain continues to offer a unique service to the industry, providing an exclusive top level domain as a development platform for innovative Internet-based services that use the well-established aviation naming and coding conventions.

Through 2006, there was a significant increase in registrants – 2,175 at 31 December, compared with around 1,800 a year earlier. This was undoubtedly helped by the success of the agreement with Afilias to provide registry services, signed at the very end of 2005 and implemented through 2006. Ireland-based Afilias provides a full range of registry services, including those in support of the .org generic top-level domain (under contract to the Public Interest Registry), the .info generic top-level domain and a number of country domains. Alongside the change – over to Afilias, the .aero team has also increased the number of registrars. There are now 13 with the authority to accept .aero domain registrations, compared with less than half that number at the end of 2005.

At the end of 2005, the .aero team submitted a proposal to ICANN for the renewal of the agreement by which SITA sponsors the domain on behalf of the aviation community. As of the end of May, as this document was going to press, the original agreement with ICANN had been extended, with negotiations continuing in a positive and constructive manner.



Registrant Group	Names at 31 Dec. 2006	% of total
Aviation Supplier or Service Prov	vider 1289	25%
Association	855	17%
Airline or Aircraft Operator	739	15%
Aerospace	567	11%
Airport	468	9%
Pilot	213	4%
Business Aircraft Operator	168	3%
Air Freight and Logistics	145	3%
Aviation Education and Research	h 121	2%
Aviation Media	113	2%
Aviation Distribution System	98	2%
Air Navigation Services Provider	93	2%
Aviation Professional	79	2%
Air Sports	76	1%
Other	57	1%
Total	5081	100%

What's happening to the digital divide?

You may not have realized it, but 17 May was World Information Society Day, a moment set by the UN to remind the world of the vision set out at the World Summit on the Information Society (WSIS) in 2005 to build "a people-centred, inclusive and development-oriented information society".



There are about 33 million Internet users in the whole of Africa – less than four percent penetration, against over 38 percent penetration in Europe and 60 percent in North America.

The drivers behind the rhetoric are, of course, relevant to the global air transport community. The WSIS vision, after all, was for societies where information and communication are the main drivers of development.

Some have, some don't

The most complex issues are to be found in sub-Saharan Africa. According to the ITU, the average monthly price for fixed line broadband service in sub-Saharan Africa is US\$ 762.

Twenty-eight sub-Saharan countries remain unconnected to any international fibre connection, although more than US\$ 2 billion of network initiatives are planned for the continent. (The one bright spot is the success of mobile – with penetration doubling between 2003 and 2005.)

There are about 33 million Internet users in the whole of Africa – less than four percent penetration, against over 38 percent penetration in Europe and 60 percent in North America. Of those 33 million, more than 12 million are north of the Sahara, five million in South Africa and five million in Nigeria – leaving less than 18 million split between another 50 countries, where penetration rates are as low as 0.2 percent.

Special feature continued...

To meet this challenge, ITU, the UN Global Alliance for Information and Communication Development, the World Bank, the African Union, the African Development Bank, the African Telecommunication Union and the UN Economic Commission for Africa are joining to launch Connect Africa, the first of a series of regional initiatives to help achieve the WSIS connectivity goals. Connect Africa will be launched in Kigali, Rwanda at the end of October.

Connect Africa aims to accelerate partnerships and the roll-out of ICT infrastructure and connectivity. The initiative will also help expand efforts to develop an enabling environment across the continent, through policy and regulatory modernization and harmonization, strengthened cybersecurity and enhanced support for migration to next-generation networks.

What has this to do with SITA and .aero?

SITA, as sponsor and manager of the .aero domain, is owned by more than 600 members – all involved in one way or another with moving people and goods between all countries in the world, both rich and poor. SITA has 1,800 customers in over 220 countries and territories. It employs people of more than 140 nationalities, speaking over 70 different languages and has a presence in 175 countries.

In Africa, just as in other parts of the developing world, the benefits of access to the global communications network – and particularly access to the Internet – are well understood. After all, the speed and pace of



digital development – particularly in terms of infrastructure and Internet governance – is an important consideration for many of SITA's customers/shareholders.

For practical reasons, SITA has a long history of providing local employment wherever possible. The company remains committed to making all of its services available to as broad a base of customers as possible. In particular, both through its work with customers — and its support for focused institutions such as the ITU, ICANN and the Internet Society — the .aero initiative is playing a central role in helping bring the power and benefits of the Internet to the global air transport community — and to their customers.

Who owns and runs the Internet – the evolving role of ICANN

When the Internet Protocol was first developed, a crowd of networks evolved beginning with the US Government-funded ARPANET. Ultimately they were linked together to create what we know today as the Internet. From the outset, no-one owned the Internet.

However, someone had to keep track of all the protocols, identifiers, networks and addresses, and the 'things' that suddenly existed, as well as make sense out of the innovations that cascaded through the Internet.

In the early days those tasks were shouldered by a giant of a man who became a legend in his own lifetime – Jon Postel. Such was the esteem in which he was held that in 1998 he was awarded the Silver Medal of the International Telecommunication Union, an award generally reserved for Heads of State. Sadly Postel died in October 1998, a massive shock to the Internet community. By that time, he had already ensured that a successor to his service was incorporated – the Internet Assigned Numbers Authority (IANA).

In September 1998, a non-profit corporation was established to take over the work of IANA, as well as a number of other Internet-related tasks. That corporation is ICANN.

IANA remains under its control through a contract with the US Department of Commerce (the US Government has claimed supervision authority over DNS and



IP address allocation management since 1997). IANA is responsible for the global allocation of IP addresses, the root zone management of the DNS and the assignment of technical protocol parameters used in a range of Internet protocols.

ICANN also has a Memorandum of
Understanding with the US Government that
sets out a number of issues to be resolved as
pre-condition for the privatization of the
Internet names and numbers administration
(although what form such privatization
might take is still a matter of much debate).

The complexity and political sensitivity of ICANN has been a central influence in its work since it was founded and it is not yet resolved – and this is not the place for detailed discussion! Those interested in the current position are referred to the report 'Global Information Society Watch 2007' published on 22 May, available at www.globaliswatch.org/en/download

Special feature continued...

Suggestions that the UN (presumably through the ITU) should take over management of the Internet have been scotched by the Head of the ITU, Dr Hamadoun Touré. In a speech at the start of this year, he said that "we must all work together, each agency has its role to play. We must come to a better cooperation ... and avoid setting up a superstructure which would be very controversial and very difficult to put into effect".

One thing is clear. Those participating in the further development of the Internet are committed and vocal. However the administration evolves over the years ahead, the enquiring spirit and community commitment that characterized the enthusiasm of the pioneers, including both Vint Cerf and Jon Postel, will remain at the heart of the Internet.



"We must all work together, each agency has its role to play. We must come to a better cooperation ... and avoid setting up a superstructure which would be very controversial and very difficult to put into effect".

Dr Hamadoun Touré – Head of ITU

Postel's Law

Jon Postel was the first editor of the legendary "Request for Comments" series, still the core repository of technical and organizational documents about the Internet, as well as technical specifications and policy documents produced by the Internet Engineering Task Force.

The first RFC was written by Steve Crocker in April 1969. As this newsletter went to press, the community was studying RFC 4893. Such was the depth of respect for Jon Postel that a memorial recollection of his life is immortalized in RFC 2468, written by Vint Cerf, one of the founders of the Internet and current chairman of ICANN.

RFC 793, written by Jon Postel in September 1981, includes a Robustness Principle, often quoted as Postel's Law. It reads, "Be conservative in what you do, be liberal in what you accept from others".

... and Air Transport News chooses .aero

The recently launched Air Transport

News — a daily e-mail and online

newsletter produced in English by

11Aviation Publications, a specialist

aviation publisher based in Athens,

Greece — is affirming its industry

credentials by using the .aero domain.

The newsletter (which can be found at www.airtransportnews.aero) provides a growing body of news and analysis, as well as a calendar of events, book reviews and industry-related jobs.





Industry events

Airline IT Summit 2007 - IT enabling the future of air transport Thursday 21 June, Brussels

Today's air transport industry is totally IT-dependent. Airlines have IT inside. It is IT that will enable the future of the industry, helping it to address the BIG ISSUES. It can enable new models that transform the business. It can enable passengers, resulting in a winning passenger strategy.

IT can help airlines to be highly responsive to change, enabling competitiveness, business growth and revenue. And IT can help airlines to address their responsibilities to environmental concerns, security matters and other issues surrounding the industry.

For more information, visit www.sita.aero

NBAA 60th Annual Meeting & Convention 25, 26, 27 September 2007, Atlanta, Georgia

The State of Georgia will celebrate Georgia Flight 100, the 100th anniversary of powered flight in Georgia when the aviator Ben Epps (NBAA Member Pat Epp's father) flew his monoplane in an open field in Athens, Georgia, thereby helping to make Georgia one of the nation's homes to aviation.

NBAA2007 will continue to build on the enormous successes of NBAA2006, which broke numerous records – 33,088 Attendees, 1,140 exhibitors, 5,235 10 foot by 10 foot Booth Spaces, 115 aircraft on Static Display and over 100 Information Sessions and Maintenance and Operations Sessions (M&Os).

Online information and late breaking news are available at www.information.aero e-mail enquiries to aero.enquiries@sita.aero

This newsletter is issued by SITA, the Sponsor of the .aero Top Level Domain. SITA also operates the official .aero web site www.information.aero – providing information about domain registrations, policies and procedures and new developments in the .aero domain.

If you would like to comment on any of the articles in this issue or you would like more information, please contact our editor, Elena Vladkova, at aero.enquiries@sita.aero

News from.aero – the domain of aviation

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