

# News from .aero

the domain of aviation

[www.information.aero](http://www.information.aero)

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What's in your name?

## Welcome

Our identity is something we spend a lot of time nurturing. Corporate identity budgets absorb millions of dollars every year, to ensure that the company is correctly presented to its stakeholders. Getting the right domain name has become a crucial element in the mix, but the availability of top level domains has become increasingly scarce, requiring increasingly creative approaches.

For anyone involved in the air transport community, the problem has been broadly resolved through the creation of the .aero top level domain. But the system is only working because of a number of simple rules that were introduced from the outset, providing guidance over natural rights to domain names.

This issue of the .aero newsletter deals with naming issues from a number of perspectives. We start by looking at the naming rules that we operate on the community's behalf. We hear something of the problems of identity theft that are largely unknown within the .aero domain – and we report on our expanding and free online directory service.

With little sign of an end to the growth in demand for memorable names and easily accessible websites, the value of air transport controlling its own industry-specific domain becomes increasingly important to the evolution of the industry itself. That's why SITA will be seeking to renew its role as sponsor for the domain. As a community-owned co-operative, we believe that SITA is best placed to deliver both the level of technical authority and serve the interests of the air transport industry as a whole in a neutral and balanced manner.

# Domain hijacking report from ICANN

The International Corporation for Assigned Names and Numbers (ICANN) recently published a report on 'domain hijacking' and its consequences. It should be essential reading for all .aero domain owners.



The report, "Domain Name Hijacking: Incidents, Threats, Risks, and Remedial Actions", provides a succinct summary of the definition and risks of domain hijacking.

'Domain hijacking' refers to the wrongful taking control of a domain name from the rightful name holder. The common use of the term encompasses a number of attacks and incidents including:

- impersonation of a domain name registrant in correspondence with a domain name registrar
- forgery of a registrant's account information maintained by a registrar
- forgery of a transfer authorization communication from a registrant to a registrar

- impersonation or a fraudulent act that leads to the unauthorized transfer of a domain from a rightful name holder to another party, and
- unauthorized DNS configuration changes that disrupt or damage services operated under a domain name, including website defacement, mail service disruption, pharming and phishing attacks.

The report continues: "Domain hijackers have a number of motives and objectives, primarily malice and monetary gain. Modification of a registrant's information and unauthorized transfer of a domain registration can cause the registrant to lose its online identity with little recourse, or it may expose the registrant to extortion by name speculators. In several documented cases, domain hijacking caused disruption or malicious use of a registrant's Internet services. By modifying the registrant's DNS information following a successful hijacking, hijackers can have material impact on the business and operations of a registrant, including but not limited to denial and theft of electronic mail services, unauthorized

disclosure of information through phishing websites and traffic inspection (eavesdropping), and damage to the registrant's reputation and brand through website defacement."

## Lower risks for .aero

The report gives real time examples and recommendations for safety measures that can be implemented by resellers, registries, registrars and registrants, as well as ICANN itself. As sponsor of the .aero domain, SITA has taken careful note of the recommendations. Many of them have already been implemented since .aero launched its operation. It seems that, as a result, the risk of domain hijacking with .aero domains is significantly smaller. However, we recommend that all .aero domain owners read the report and implement changes as appropriate.

A dedicated section of FAQs has been published on our web site [www.information.aero](http://www.information.aero). The full text of the ICANN Report can be downloaded from [www.icann.org/announcements/hijacking-report-12jul05.pdf](http://www.icann.org/announcements/hijacking-report-12jul05.pdf).

# Reservation of FAA airport codes in .aero under review

As .aero has developed, the awareness of airport three letter location identifiers as shortcuts for pilots, travellers and other industry professionals has also increased.

Current .aero registration policy allows the reservation and registration of IATA-assigned location identifiers for this purpose but most airports in the US know the code as their three letter location identifiers as assigned by the Federal Aviation Administration (FAA) – and these are not always the same as the IATA codes.

Current registration rules in .aero domain do not contain any special provision for registration of FAA assigned 3- and 4- character location codes. Registration is allowed on a first come first served basis to any applicant if the name is available and does not conflict with any other rule currently in place.

SITA, as sponsor of .aero, receives many requests for registration of FAA location identifiers. Some of these requests have been accommodated in the past since the IATA location code was the same as the FAA assigned code or because the FAA assigned code did not match any reserved name and was available for registration on a first come first served basis.

However, existing rules prevent 49 percent of FAA assigned three character codes from registration and there have been individual registration requests that could not be satisfied.

After frequent requests from airports in North America for the registration of a domain name that matches their assigned FAA code, SITA and the Dot Aero Council are currently reviewing whether to allow registration of FAA location codes, using 'end-user convenience' as the guiding principle for policy change.

Depending on the outcome of the policy decision, FAA airports may be able to register on an individual basis in the near future, using FAA assigned codes.

To keep abreast of this new development, visit [www.information.aero](http://www.information.aero) and click on the 'Registrations' icon.



# International Registry of Aircraft Assets

This registry will allow financial institutions to register their financial interest in aircraft and through this establish their priority of interest in such holdings. As a result, the risk of lending can be better assessed allowing financial institutions to drastically reduce the interest rates they currently charge. This is expected to reduce aircraft leasing costs by approximately 2 per cent globally, saving the airline business around US \$ 5 billion each year.

Aviareto, a joint-venture between SITA SC and the Irish Government, has been selected by the International Civil Aviation Organization (ICAO) to create and manage the International Registry of Mobile Assets. Both the Registry and Aviareto will be readily identifiable and accessible to users through use of .aero domain names.

The Registry provides a central repository, an electronic database, that will record interests in aircraft equipment - airframes, aircraft engines and helicopters - involving transactions in Cape Town Treaty contracting states. As a result, the risk of lending can be better assessed allowing financial institutions to drastically reduce the interest rates they currently charge.

## **Benefit for the aviation sector**

The Treaty will help align law with financing and leasing practices that are common worldwide. That alignment, enhancing predictability on the rights established by contract and secured by aircraft equipment, will materially reduce risk and provide



efficiencies for the benefit of the whole aviation sector. It uses the concept of an "international interest" in equipment that will be recognized and enforced in all contracting states.

The Cape Town Convention – a framework document – is modified by the Protocol (for Aircraft Equipment) and may be modified in the future by other protocols for other types of mobile equipment.

**The Treaty will help align law with financing and leasing practices that are common worldwide.**

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## **.aero industry news** continued...

The International Registry is at the centre of the Cape Town Treaty system. In simple terms, if interests that are registrable under legal texts are not registered with the International Registry when the Cape Town Treaty applies, they will not have priority over those that are registered. In that sense, registration is legally mandatory, if priority – a key feature of any financing – is to be ensured. The International Civil Aviation Organization will act as “Supervisory Authority” for the International Registry.

Aviareto has been charged with setting up the Registry and then managing it on behalf of ICAO and the air transport community.

“Naturally, Aviareto chose .aero as the principal domain, both for the Registry and for Aviareto,” explained SITA’s Head of Business Development Relationship Management and Head of New Business Ventures René Azoulai. “When it goes live, the site [www.internationalregistry.aero](http://www.internationalregistry.aero) will be where the relative priority of debtor and creditor rights will be recorded. It was important that the Registry had its own first

level domain that clearly identifies its exclusive relevance to the air transport community. Only the .aero domain could provide that.”

The Registry is expected to go live early in 2006, 90 days following ratification of the Cape Town Convention by an eighth country. To date, seven countries (Ethiopia, Ireland, Nigeria, Oman, Pakistan, Panama, and the United States) have ratified the treaty, with several more preparing to sign

The site [www.aviareto.aero](http://www.aviareto.aero) is the home website for the company responsible for managing and operating the Registry. You can visit the Aviareto website and learn more about this ground-breaking project at [www.aviareto.aero](http://www.aviareto.aero).



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René Azoulai – SITA’s Head of Business Development Relationship Management and Head of New Business Ventures

# Aviation's own online directory – now LIVE

The .aero directory was first introduced in May 2004 as a community service from SITA, the sponsor of the .aero domain.

It has now been upgraded and expanded to provide a comprehensive online guide to .aero domain registrants, covering all sectors of the community – from airlines to air sports companies and aviation media.

The free directory will allow users to search within more than 100 subdivisions of 19 categories, each of which is specific to the aviation industry. Future development plans include the addition of more subdivisions. Search capabilities have also been upgraded to allow users to search within segments of the aviation industry by category of activity, product or service.

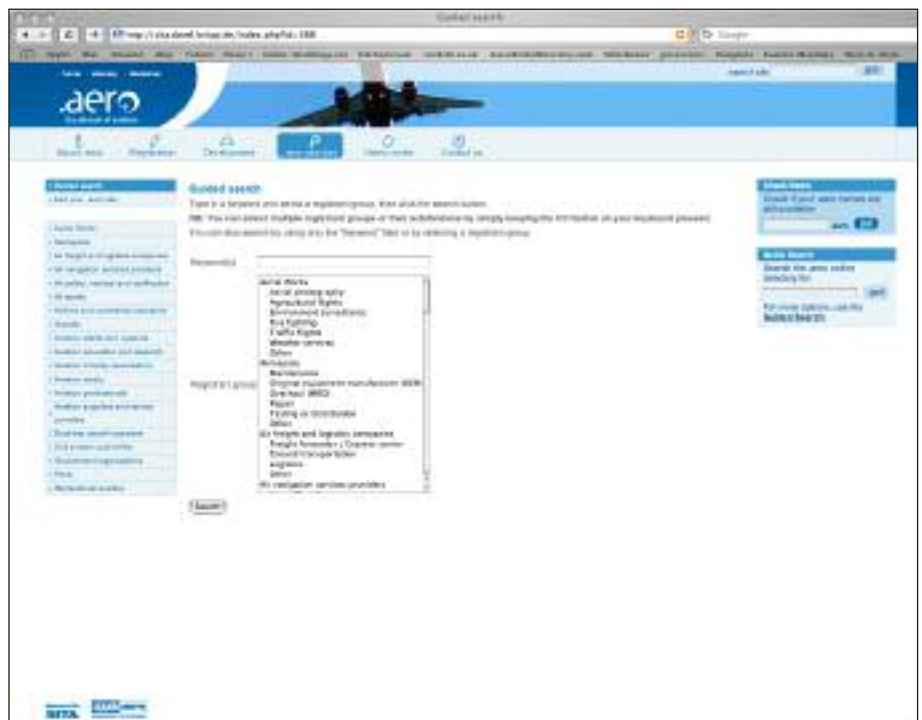
Valuable and easy to use, the resource will enable companies and organizations to locate precise and detailed information about aviation services and products, delivering a faster and more focused alternative for those searching for specific aviation sites, in place of general purpose search engines.

Those using the directory service will be able to do so with an added degree of confidence, given the requirement that

registrants must be verified as an aviation company, professional or organization before they will be permitted to acquire the relevant .aero domain name.

Listing in the .aero directory is open to all registered .aero domain name holders at no charge. If you have an active .aero website, then do not miss out on this opportunity and submit your details today – visit [www.information.aero](http://www.information.aero) and click on the '.aero directory' icon.

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# What's in your name?

How complex was the process of selecting and securing your domain name? Was the name of your choice available? SITA's .aero office and .aero registrars alike are often asked why this or that name is not available. In this article we explain some of the basic rules of domain name registration within .aero – as well as some of the developments taking place in the .aero name space.



## Point number one: domain names are your digital identifier

Confused? Don't be, it's simple. Most people who use the Internet today rely on the Domain Name System (DNS), in layman's terms the 'Web address', and navigation tools provided to find the resources they seek. As many as half of all users locate a website for the first time simply by typing the relevant name directly into the browser's address bar. So ownership of a simple and memorable domain name, which the user is likely to remember, is essential for anyone whose products and services can be reached on the Web.

Originally, it was not so easy. DNS was introduced in the 1980's as a more memorable and more permanent alternative to using numeric IP addresses (try remembering 213.174.196.170 instead of www.easyjet.com).

With the increasing importance of domain names – and the relatively low cost of obtaining names within the generic top-level structure – some less desirable effects, such as domain name speculation, came into play. As a result, across generic top-level structures such as .com, .net and country domains, the naming space has become very patchy. The reliability of 'guessing' the names has become less sure.

Companies may have to pay speculators amounts well above the cost of registration to get hold of the name they want to use.

These issues cannot be avoided completely. But a community specific domain, such as .aero, can do a great deal to limit the effect of such activities. It will improve the predictability and reliability of the name space – and so the experience of both registrants and users. Domain registration policies, which guide the availability of names and associated verification processes, are designed to do exactly that.

## So, what are the .aero 'naming' rules – and why have them?

From experience, three basic rules have emerged, focused around the community's needs.

**1. Important aviation-specific names –** such as widely used and recognized airline and airport designators need to be protected and restricted for use by their respective code holders. So all 2 and most 3 character codes are reserved in their favour: anyone else trying to register a name based on these would be denied registration.

**Why?** The aviation community has been using codes for communications since the early 1950s, when ICAO, IATA and SITA agreed on the need for industry standards for both message content and protocols. The result was agreement over designator systems for the industry – still a key element of the industry's infrastructure.

Today, short memorable and often intuitive codes are known and used by people within the industry as well as the public. So 'BA' is widely known as the code for British Airways; 'KLM' is both an established airline brand and that airline's code; LAX is widely used as shorthand for Los Angeles International Airport. These are all aspects of a good domain name. The use of the domain .aero offers a unique opportunity to airlines and airports to connect with travellers and those within the industry in a simple and straightforward way. Hence operational domains such as ba.aero, nw.aero, lcy.aero or jfk.aero.

The evolving system by which industry codes are reserved means that some domain names, based on codes that have been registered in the past, are now colliding with newly reserved codes. This happens in any system where rules and policies evolve over time. In this case, typically, new rules are applied to newly registered names and ownership transfers, but not retrospectively to current registrants. When a name is deleted and registered again or subject to ownership transfer, it is subject to new rules.

Some airline codes are shared by more airlines or overlap with airport codes. While it is impossible to guarantee 100 percent reliability of such names for automated applications, such intuitive shortcut system can work well for needs of many passengers and industry professionals. So much so that, at the request of a number of US airports, the Dot Aero Council is now considering extension of the reservation to include FAA airport codes. See separate article on page 4.

## **2. Second level (anymame.aero) domain**

**names** – should be available to all members of the community on an equitable first-come first-served basis.

**Why?** We believe that second level domain names spaces will remain predominantly for all other domain names except codes such as company and service names. The space is an area which must serve the community as a whole and since most names on the second level (anymame.aero) will continue to be used for branding of aviation products and services, the first-come first-served basis is the most appropriate. Unfortunately predictability on this level cannot be achieved, because different interests will always compete for the same name space to get short memorable names for user convenience and comfort.

Domain names are an essential means of establishing a company's brand identity on the internet – and the registration process used at .aero helps eliminate speculators and cybersquatters by ensuring that

registrants are genuine. Generic top-level domains (such as .com and .net) do not identify your industry focus and do not easily increase your visibility. However, the .aero suffix guarantees an identity as being within the aviation community.

**3. Structured and fully predictable domain names** – important for use by computer applications or for highly professional purposes, will gradually move to regulated use-specific sub-domains.

**Why?** Complicated coding structure with very specific allocations, which will have increasing importance for addressing industry applications and services, will shift to dedicated sub-domains. For example, this may be the case for messaging addressing structures that accompany new XML standards, identifiers needed for international baggage processing systems, VoIP telephony, or identifiers needed to locate airport systems and applications.

Put simply, the sub-domains may well evolve into strict coding structures for individual segments of the air transport community and form the backbone for industry applications. To ensure interoperability, .aero policies may need to include other industry standards and policies as a reference point. This is the essence of a community domain.

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## Special feature continued...

### DAC

These three domain rules constitute a core element of the policies that have been agreed by the Dot Aero Council (DAC) in response to the needs of the .aero community, and that are implemented by SITA, as custodian of .aero on behalf of the aviation community.

The DAC provides the community with a forum for the effective exchange of information, to ensure that the future development of .aero meets the growing needs of the community as a whole. DAC members are drawn from the key aviation associations, each member representing a

Registrant Group. DAC members contribute to the development of .aero by expressing recommendations on rules and mechanisms of determining eligibility, domain applicability, and overall development of .aero. In particular they contribute to definition of the naming convention and the .aero domain name allocation rules within the Registrant Group they represent.

If you would like to share your views, contact SITA at [aero.enquiries@sita.aero](mailto:aero.enquiries@sita.aero) or your sector representative as listed on the [www.information.aero](http://www.information.aero) website DAC page.

For figures on the growth of the generic domain name sector, download Verisign's brief from [www.verisign.com/stellent/groups/public/documents/newsletter/031399.pdf](http://www.verisign.com/stellent/groups/public/documents/newsletter/031399.pdf).



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## It's all in the name - [www.nafa.aero](http://www.nafa.aero)

[www.nafa.aero](http://www.nafa.aero) provides a case book example of the benefits of using the .aero domain as a means of providing the essential differential among domains.

The lottery of who got the name first can be particularly difficult for associations – which may end up with initials that identify it clearly within its own sector of interest, but which may also duplicate the initials of an organization in a completely different sector.

In pre-Internet days, that did not present a problem. For example, those involved in financing general aircraft were unlikely to be involved with a body involved in 'teaching artists the fine art of making art' or with an association for those involved in managing fleets of cars, trucks and vans. But unique means unique within the Internet and all those groups use the initials 'NAFA'. So the art group took [nafa.com](http://nafa.com) (first registered 1994) and the fleet management association took [nafa.org](http://nafa.org) (first registered 1995), while the National Aircraft Finance Association took [nafa-us.org](http://nafa-us.org) (first registered 1999).

Today type "NAFA" into Google and the first page comes up with a whole range of organizations using these initials, as well as those already mentioned. They include the North American Flyball Association ([flyball.org](http://flyball.org)), the Nanyang Academy of Fine Arts ([nafa.edu.sg](http://nafa.edu.sg)), North American Fur Auctions ([nafa.ca](http://nafa.ca)), and the North American Falconers Association ([n-a-f-a.org](http://n-a-f-a.org)).

Not surprisingly, NAFA decided to remove itself from the web noise, focusing its Internet naming policy exclusively at its core business – the air transport community.

"Adopting the .aero naming structure was an obvious choice for us," according to NAFA Treasurer and Executive Director Karen Griggs. "There are 83 million domain names worldwide and 46 percent of those are .com. No wonder there can be confusion. Our business is specific – it's of no interest to the vast majority of those using the Internet. But those who do deal with us need predictability – and we need security. Adopting the .aero domain has yielded both. Our members and stakeholders know where they can find us. And that's what counts."

The National Aircraft Finance Association, NAFA, is a US-based non-profit corporation dedicated to promoting the general welfare of individuals and organizations providing aircraft financing and loans secured by aircraft; to improve the industry's service to the public; to work with government agencies to foster a greater understanding of our member's needs.

NAFA's membership and associate membership of some 120 companies are all leaders in helping buyers, sellers and



finance companies within the aircraft transaction process. The organization also provides members with a forum for both education and the sharing of information and knowledge – all directed at encouraging the financing, leasing and insuring of general aviation aircraft.

NAFA aims to improve the lien holder's position relative to aircraft titling; to obtain better clarification of insurance coverage and endorsements; and to improve service from the US Government's Federal Aviation Administration's Registry.

Full Membership in the association is open to all persons or organizations who in the course of their normal business provide financing for the purchase of aircraft or who make loans secured by aircraft. Associate Membership is open to any individual or organization who is engaged in any business relating to the aircraft financing industry.

## SITA seeks to renew sponsorship of the .aero TLD

It has been five years since SITA first sought to sponsor the application for the new Top Level Domain Name (TLD) .aero, reserved exclusively for members and governed by the aviation community. Now it's time for renewal.

The aviation community operates through and relies on shared infrastructure, procedures and standards. Through the .aero domain, these benefits continue to be available for communications over the Internet.

As the established industry focal point for technology and communications, and as the sponsor of .aero, SITA has been working with the Dot Aero Council (DAC) to develop infrastructure, conventions and policies in the .aero domain. For example, the identification and development of naming structures is ensuring travellers and industry professionals have access to a fast and simple means of

accessing information related to air transport. Short and predictable domain names, based on recognized industry naming conventions, as well as deployment of '.aero shortcuts', are designed to streamline industry communications.

### Worldwide support

SITA's original .aero proposal to ICANN received strong support from the worldwide aviation community, demonstrating confidence that SITA would serve the interests of air transport as a whole in a neutral and balanced manner. That confidence has been repaid across the whole range of domain policies and innovations. For example:

- airport and airline codes have been pre-registered for designated code holders and provide a shortcut for passengers and industry professionals as a means of locating existing websites

- thanks to strict eligibility verification processes, there has been little evidence of cybersquatting or name speculation
- the new online directory has been introduced as a non-commercial free service.

The sponsorship agreement with the Internet's regulating body ICANN now requires SITA to formally express its intention to renew.

SITA believes that its continued sponsorship would be in the best interest of the sponsored TLD community and the global Internet community, and intends to submit its application to ICANN later this year. We hope the community that we serve will continue to support us, and will actively endorse this application. Further information will be posted on [www.information.aero](http://www.information.aero).



## Industry events

### Note: NBAA 58th Annual Meeting & Convention

This will be relocated to Orlando, Florida. The Convention will take place from Wednesday 9 November - Friday 11 November, a week earlier than originally planned.

For more information visit [www.nbaa.org](http://www.nbaa.org)

### IATA's Strategic Information Technology Conference, 29-30 November 2005, Bangkok, Thailand

For more information visit [www.iata.aero](http://www.iata.aero)

### ACI Quality of Service at Airport Conference, 14-16 February 2005, Doha

For more information visit [www.aci.aero](http://www.aci.aero)

### ACI Airport IT Summit in Conjunction with Passenger Terminal Expo, 21-23 March 2005, Paris, France

For more information visit [www.aci.aero](http://www.aci.aero)

### Aviation and Environment Summit, 25-26 April 2006, Geneva, Switzerland

For more information visit [www.environment.aero](http://www.environment.aero)

Online information and late breaking news are available at [www.information.aero](http://www.information.aero)  
e-mail enquiries to [aero.enquiries@sita.aero](mailto: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](http://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, Paola Piacentini, at [aero.enquiries@sita.aero](mailto:aero.enquiries@sita.aero)

### News from.aero - the domain of aviation

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