Editorial

Dear Reader,

Today, aviation is a part of our everyday lives. It ensures Switzerland’s connection to international markets and makes a significant contribution to the prosperity of our population. So that this continues to be the case, political conditions must be created to enable the demand-orientated development of aviation infrastructures.

However, two proposals to be voted on by Zurich’s voters on 27 November 2011 have the power to endanger the further development of Switzerland’s most important airport. They are the “Initiative II” opposing the construction and expansion of runways, which was submitted by 42 municipalities, and the counterproposal from the VFSN (an association opposing the flight route from the south), which is even more severe in its demands. In this issue of the Political Newsletter we will show you how the acceptance of either of these proposals would have considerable negative effects on the airport. Zurich Airport explicitly supports the rejection of both proposals.

Moderate development of the airport’s infrastructure is necessary so as to maintain a high level of quality and ensure passengers a pleasant stay and efficient handling whenever they arrive, transfer, or depart. The most important projects in this context are the renewal of Dock B and the new security check building. Preparations for commissioning these new facilities on 1 December 2011 are proceeding at full pace. I would like to stress that Flughafen Zürich AG is financing the construction and operation of these two buildings from its own funds – without any public subsidies.

Since Zurich Airport is surrounded by densely populated municipalities, we take the needs of the people who live and work near the airport very seriously. It is important to us that aircraft approach the airport using minimum engine power in order to save fuel and minimise noise exposure. This is ensured through the innovative approach technique known as Continuous Descent Approach, which we will explain to you in this issue of the Political Newsletter.

I hope you enjoy reading this issue, and thank you for your interest in Zurich Airport.

Thomas E. Kern
Chief Executive Officer
Green approach at Zurich Airport too

Continuous Descent Approach (CDA) is an approach technique which minimises engine power and can thus help save fuel. Zurich Airport is among those who use this technique.

For several years, politicians, the public and representatives of the airlines have been calling for the introduction of the Continuous Descent Approach, also called CDA. In July of 2009, for example, the two Cantonal Councillors Marcel Burlet and Willy Germann submitted a parliamentary motion to this effect to the Zurich Cantonal Council. Some airports, such as Stockholm’s Arlanda Airport, have generated positive publicity by presenting the introduction of the CDA as a “green approach”, and are consequently often cited as examples of innovative airports. Others, such as Zurich Airport, have been using the CDA for years now – unperceived by to wide segments of the population. In this article you will therefore find an answer to the question of what CDA is and how it is used during approaches at Zurich Airport.

Innovative approach technique reduces fuel consumption

In its Document 9931, the International Civil Aviation Organisation (ICAO) defined the CDA as “an aircraft operating technique where an aircraft descends continuously from an optimal position, in order to reduce fuel burn, emissions and noise through increased flight altitudes, low engine thrust settings and where possible a low drag configuration.” Contrary to common parlance, CDA is not an approach procedure, but rather an approach technique in which the aircraft descends using minimum engine power and avoids horizontal flight phases as much as possible. This approach technique can be used with both traditional and satellite-based approach procedures. In comparison with conventional approach techniques, CDA reduces fuel consumption, which lowers both CO₂ emissions and airline costs.

Noise exposure reductions possible in some phases of approach

In some phases of the approach, noise reduction can also be achieved through higher crossing altitudes and lower engine power. At airports which use instrument landing systems (ILS), as Zurich Airport does, the CDA ends relatively far away, i.e. when the final approach is reached about 15–20 kilometres ahead of the runway threshold. From that point on, the aircraft follows the prescribed ILS beam in its final approach. This system also applies in Zurich to the satellite-based approach practised since March 2011, in which the aircraft uses nearly the same approach profile in its final approach as it would during an ILS approach.

Profile comparison of CDA with conventional approach techniques.
Graphic: http://silentaircraft.org/approaches
Eurocontrol supports introduction of Continuous Descent Approach

In Europe, the European Organisation for the Safety of Air Navigation (Eurocontrol) was commissioned to support member states and their airports in introducing CDA. Eurocontrol maintains a map showing all the airports which presently practise CDA. Zurich Airport is among them. As explained above, pilots control the aircraft during a CDA so that it arrives at its final approach using minimum engine power and a continual descent, which requires that pilots have reliable information on the flight distance remaining before the final landing approach so that the descent can be optimally planned. This has been occurring in Zurich for many years by using information on the remaining flight distance provided by air traffic controllers, whose instructions guide incoming aircraft to their final landing approaches.

Major challenge with dense approach traffic

In an ideal world, CDA would mean that all airplanes could plan their approaches to enable them to glide at idle from their cruising altitudes to their final approaches. Yet descent profiles vary considerably according to aircraft type, speed and weight, so that an extremely large airspace would be required to implement this ideal without any limitations. From the point of view of flight safety it is naturally important to ensure, with CDA as with any other approach technique, that aircraft never converge critically – a very demanding task with flight routes that cross! This is why the use of CDA at airports with a high traffic volume poses a particular challenge and is impossible at certain times. On the other hand, fundamentally every aircraft – from a small business jet to the Airbus A380 – can fly a CDA regardless of its equipment, since, as explained, it is an approach technique.

Further increases in approach efficiency

It is very important to Flughafen Zürich AG, the Swiss air navigation service skyguide and the hubcarrier Swiss, which operates from Zurich, that aircraft be able to approach Zurich Airport as efficiently as possible; i.e. with the lowest possible emissions and aircraft noise. In order to improve the present situation even more in future, Flughafen Zürich AG, together with skyguide and Swiss, applied two years ago for the publication of transitions – that is, defined approach routes from the holding pattern to the final approach – which help make the flight path more predictable and thus more planable for aircraft pilots. This step requires cross-border coordination by the Federal Office of Civil Aviation (FOCA) with the German authorities, because the latter want to map these routes, which cross Germany, in the current German executive order. Unfortunately this coordination is taking much longer than planned, for which reason these flight paths have yet to be introduced. However, Flughafen Zürich AG is confident that the introduction will take place in 2012. In a subsequent step, Flughafen Zürich AG intends to define a pilot descent profile on the transitions it introduces in order to optimise conditions for the Continuous Descent Approach.
Two “no” votes = “yes” to the airport

On 27 November 2011, the voters of the Canton of Zurich will decide on a political initiative and its counterproposal. Both of these proposals would hinder the development of Zurich Airport and are unnecessary.

The initiative submitted by 42 Zurich municipalities calls for legislation to be changed to prohibit both the construction of new runways at Zurich Airport and the expansion of existing ones. A counter-proposal from an association opposing the flight route from the south (VFSN) goes far beyond the demands of the initiative, calling for the construction of new high-speed taxiways to be prohibited as well. It also demands that permission be rescinded for those new flight routes over densely populated areas that have been introduced since the year 2000. In addition, directives from the Government Council to the state representatives on the Board of Directors of Flughafen Zürich AG would have to be approved by the Cantonal Council in the form of a resolution subject to an optional referendum.

Zurich Airport must be allowed to develop in line with demand. For this reason, both proposals must be clearly rejected.

- **Both proposals are unnecessary.** Current airport legislation mandates a Cantonal Council resolution subject to an optional referendum for any changes to the existing runway system. In short: the voters already have the last word on this subject.

- **The development of Zurich Airport would be threatened.** Accepting these proposals would only worsen the existing take-off and landing bottlenecks during peak times. Flughafen Zürich AG’s ability to act and the development of this important aviation infrastructure would be severely hindered and this would entail a loss in future prospects for the companies at the airport and their employees.

- **Decline in attractiveness of Zurich as a place to live and work.** The airport is a significant economic and location factor. It contributes to making the Canton of Zurich one of the most attractive places to live and work, both in Switzerland and across Europe. Further restrictions and impediments to Zurich Airport would weaken the attractiveness of Zurich for residents and businesses.

- **More bureaucracy and more complicated planning.** Every change to flight operations, however small, would require approval through protracted voting procedures and mean additional bureaucratic hurdles.

- **Delays in construction improvement measures.** Construction measures intended to reduce noise, save resources or ensure smoother operations would be hindered or delayed for years.

- **Both proposals disempower Zurich’s Government Council and its Cantonal Council and rob Zurich’s voters and coming generations of influence.** These proposals eliminate every freedom to act with regard to planning and construction projects; the counterproposal even hampers operational planning at Zurich Airport.

- **Restrictions by stealth.** The two proposals seek to achieve exactly what the voters rejected a short time ago: restrictions on air traffic, which would be achieved here by stealth via a prohibition on planning and construction.

The Government Council of the Canton of Zurich and Flughafen Zürich AG therefore recommend that both proposals be rejected. Vote “no” to both proposals on 27 November 2011 and say “yes” to the airport.
Leaving doors open

Last year, 23 million people used Zurich Airport for arrival, transfer or departure. 23 million people – three times the entire Swiss population! Even Swiss travellers from far beyond the Canton of Zurich cannot imagine doing without Zurich Airport when it comes to flying to a holiday destination in the land of their dreams or to a business appointment.

Our airport guarantees our mobility and thus our prosperity. It is therefore indispensable to the men and women who work in Switzerland’s hotels and restaurants catering to tourists’ needs. It is indispensable to companies who depend on being able to deliver their goods in a fresh condition to their customers and as quickly as possible. It is indispensable to service providers who value face-to-face meetings with a client base spread across all four corners of the earth. And it is indispensable to people whose family members live in faraway countries, because now and then we all want to hug our loved ones no matter where they live: aviation brings them together.

So how can we preserve these benefits for more than 20 million people without their being overshadowed by the negative aspects of aviation – noise exposure and environmental pollution? The political initiative that is up for vote on 27 November claims to have found the answer to this question. It seeks to limit these negative aspects by prohibiting the construction and extension of runways. Among the reasons for this proposal is that if there is no prohibition, both air traffic and noise exposure will increase.

I do not share this view. The work we have done on the Sectoral Aviation Infrastructure Plan has shown that there are scenarios requiring runway construction that nonetheless result in less noise exposure than current operations. In other words, changing a runway could reduce the aircraft noise burden. And currently valid airport legislation already stipulates that residents of Zurich should be able to vote on planned runway construction since this is subject to an optional referendum. So I ask myself why we should close a door, now and forever, that we could always close as needed in future through a referendum, should that ever become necessary.

The counterproposal to be voted on the same day goes even further, requiring an additional prohibition of high-speed taxiways and insisting on the abolition of aircraft approaches from the south. However, the demands of this counterproposal are largely obsolete or unrealistic. The government of the Canton of Zurich has been trying for years to avert approaches from the south – with all the instruments at its disposal. Urging the Canton to move in this direction is thus superfluous. And high-speed taxiways are necessary to ensure a well-performing, safe airport. It is environmentally unfriendly to make aircraft spend time in holding patterns because runways are blocked.

The airport constitutes an irreplaceable benefit to the Canton of Zurich, which must strive to be an internationally competitive business location. Which business location anywhere in the world has an international airport that can be reached from the centre of the city in just fifteen minutes? Nobody can take away this advantage – unless we rob ourselves of it. This is why I am casting two “no” votes on 27 November.

Ernst Stocker

Ernst Stocker

Governing Councillor of the Canton of Zurich

Head of the Department of Economic Affairs of the Canton of Zurich
Public transport hub

In contrast to the flight connections themselves, Zurich Airport’s outstanding public transport connections are rarely talked about – and yet they offer great benefits for passengers, residents and the environment.

On an average day, 338 aircraft take off from Zurich Airport. However, the public transport figures are even more impressive: on workdays, 301 trains, 720 buses and 339 trams stop at Zurich Airport, for a total of 1360 connections. At peak times during rush hour, a train, tram or bus stops at Zurich Airport every 37 seconds, making it one of the most heavily frequented public transport hubs in Switzerland.

Direct train connections to other parts of Switzerland

This dense public transport network is extremely useful for travellers. Around half the passengers who depart from Zurich Airport arrive there by train, tram or bus. This should not surprise anyone, because train connections allow travellers to arrive at the airport – comfortably and without changing trains – from many regions of Switzerland. This benefits travellers flying into Zurich Airport, too, when they can travel directly to Berne, Basel, St Gallen, the Valais region or Lucerne, for example. Scarcely any other airport in Europe is so well embedded in the country’s long-distance public transportation network. The local network is also highly developed. Commuters appreciate the many connections and short transfer distances that take them to work every day. With the new tramlines 10, opened in 2008, and 12, opened in 2010, connections to the rapidly developing regions to the east and south of the airport have improved even further. And it takes just under fifteen minutes to reach the centre of Zurich, which, for example, motivates arriving business travellers to use public transportation instead of taking a taxi, as is customary abroad.

More public transport means less environmental pollution

The share of people arriving at Zurich Airport by public transport is a high 46.2% (status: 2009). This is an important contribution to reducing the environmental effects of an airport: on a pro-passenger basis, public transport indisputably emits fewer pollutants and greenhouse gases than individual motorised transport. It is therefore clear that Flughafen Zürich AG will continue to promote public transport in future.

Zurich Airport is easy to reach using public transport.
Photos: Flughafen Zürich AG
Improved handling thanks to centralised security checks

In order to make departure handling processes easier and more comfortable for passengers, Flughafen Zurich AG has constructed a centralised security building that will be commissioned on 1 December 2011 at the same time as the new Dock B. Flughafen Zürich AG has invested CHF 130 million in this new infrastructure.

Clear, expansive architecture
The new centralised security building is located between Check-in 1, Check-in 2 and the Airside Center. With its transparent, expansive architectural style, this functionally designed new building embodies the “Swissness” that characterises Zurich Airport. It can be reached via entrances from Terminals 1 and 2. The expansion of the existing commercial zones on the two main levels will connect the centralised security building to the existing Airside Center. Depending on passenger volume, up to four levels of the building can be used for security checks. Flughafen Zurich AG has invested CHF 130 million in this new infrastructure.

Short distances and minimum waits
In future, the central security check of all passengers beginning their journey in Zurich will be carried out here. Transfer passengers from a non-Schengen country to either a Schengen or non-Schengen destination will go through transfer security checks at Dock B or Dock E. The new facility offers the advantage of simpler, pleasant handling of necessary processes for departing passengers. Short distances from check-in to boarding card checks to the subsequent security checks mean that the most important passenger handling steps at the airport appear to be part of a single process. Automated boarding card checks and the ability of the security checkpoints to react quickly to increased passenger volume will reduce waiting time and give passengers more time to spend at Airside Center.

Bright, friendly atmosphere
The centralisation of security checks means that distances for the security control personnel of Zurich’s cantonal police have also been reduced. The centralised security building also offers additional workplaces in a new, bright, friendly space. The improved work atmosphere and open design will contribute to a calmer, smoother flow during security checks.

Personnel training and system testing
The most important preparations for commissioning have been underway since September 2011. The security facility and its processes have to be integrated into the airport’s ongoing operations, personnel must be trained, and systems and processes tested.

Centralised security building ready for operation from 1 December 2011
At the end of November 2011, the new Dock B and the centralised security building will be officially inaugurated in the presence of Swiss Federal Councillor Doris Leuthard, who directs the Federal Department of Environment, Transport, Energy and Communications. Commissioning will follow on 1 December 2011.

Zurich Airport continues high-quality operation
Short travel times between gates, short waiting times for checks and friendly, helpful personnel will continue to ensure that Zurich Airport is one of the most sought-after in Europe.
Traffic statistics

Passenger volume at European airports in 2010
In 2010, 65.9 million passengers used Europe’s largest airport: London Heathrow. Together with Paris’ Charles de Gaulle airport and those in Frankfurt, Madrid and Amsterdam, London Heathrow is among the mega-hubs which claim a very large majority of transfer passengers. With 22.9 million passengers, Zurich Airport takes 11th place among European airports, preceded by airports such as Rome, Munich or Barcelona. It is therefore clear that Zurich Airport is no mega-hub.

Passenger volume at European airports in 2010
Number of passengers (in millions)

Traffic trends at Zurich Airport in the first three quarters of 2011

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<thead>
<tr>
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<th>2011: January – September</th>
<th>2010: January – September</th>
<th>Change in % in 2011 compared with 2010</th>
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<tbody>
<tr>
<td>Local passengers</td>
<td>12,154,290</td>
<td>11,182,162</td>
<td>8.7</td>
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<tr>
<td>Transfer passengers</td>
<td>6,233,512</td>
<td>5,891,348</td>
<td>5.8</td>
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<td>Share of transfers</td>
<td>33.8%</td>
<td>34.4%</td>
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<tr>
<td>Total passengers</td>
<td>18,455,342</td>
<td>17,136,482</td>
<td>7.7</td>
</tr>
<tr>
<td>Air traffic movements</td>
<td>212,507</td>
<td>202,311</td>
<td>5.0</td>
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<tr>
<td>Freight in tonnes</td>
<td>310,770</td>
<td>301,537</td>
<td>3.1</td>
</tr>
<tr>
<td>Mail in tonnes</td>
<td>23,298</td>
<td>19,356</td>
<td>20.4</td>
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Source: Flughafen Zürich AG

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