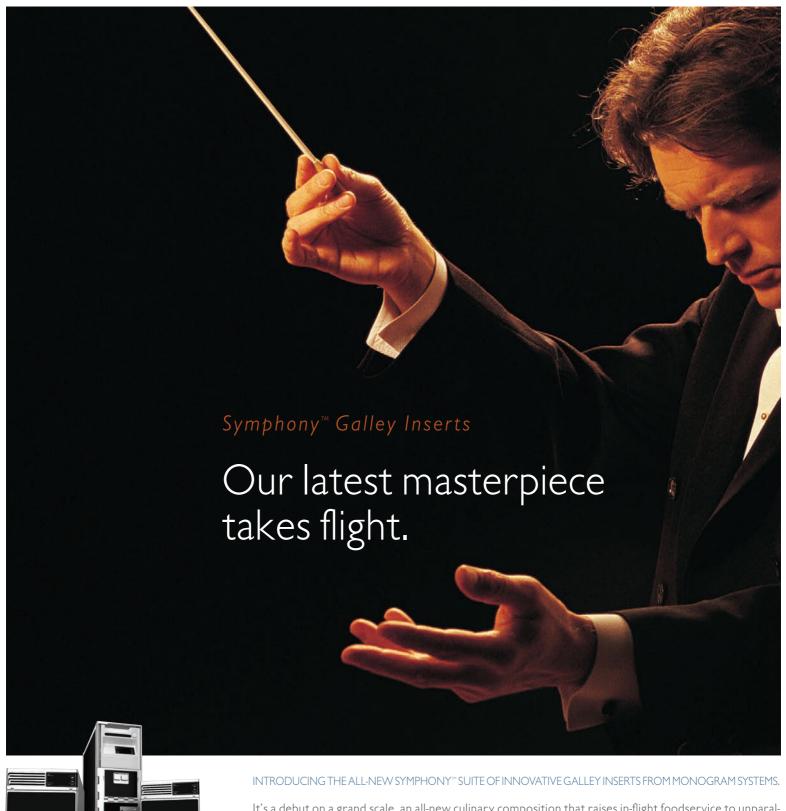
What's inside? Premium-cabin service Tray table design Oven technology The promium of the pr

THE INTERNATIONAL REVIEW OF INFLIGHT CATERING AND ONBOARD SERVICE





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Airline CATERING

taking**care**

Now, I hate to conform to stereotypes, but I'm a Brit who loves her tea. Earl Grey, Lady Grey, Ceylon, Chai, Assam, Darjeeling, Green, White – I thought I'd tried everything. But I have to admit I was taken aback at how complex a world tea really is when I went to look around the Twinings factory in Andover, UK. The multitude of wonderfully named varieties and leaf grades (special finest tippy golden flowery orange pekoe, anyone?); the various ways of processing leaves; the effort that goes into creating new blends; the constant reviewing of product for consistency; the exact science of brewing - it was a revelation. I went to the factory because Twinings is now the sole supplier of tea to British Airways - and has produced an English Breakfast blend tailored to the inflight environment, along with an exotic range for the first-class cabin. You can find out more about the project on page 8, but suffice to say I was in tea heaven, despite the less-than-fetching hair net and overalls (thankfully not pictured).

My lasting impression is how much skill and thought goes into something most consumers don't think about very much. Likewise, many airlines are going to great efforts to take care of their passengers, particularly in first class. We take a look at recent premium-class schemes on page 14 - from inflight chefs to more personalised service and tie-ins with big brands and celebrity chefs. Some of this effort is also trickling into economy via the buy-onboard model - special menus that are perks in first class are being sold in economy. It seems like a win-win situation – passengers get more choice and quality, and airlines can make some ancillary revenue. We investigate how airlines can sell their wares effectively on page 28.

Buy-onboard and greater customisation are just two of the onboard service trends noted in our round-up on page 4, for which I picked the brains of airline executives, suppliers and other experts. Also in this issue we provide a comprehensive preview of the rebranded World Travel Catering and Onboard Services Expo (p36); look at the challenges of tray table design and ask designers what they'd do differently in an ideal world (p10); take a sneak peek at various airlines' amenity kits (p6) and teddy bears (p56); and look at how the Boeing 787 and A350 programmes have changed how ovens are made and the technologies they employ (p20). After all, if airlines want to improve food service on board - whether in pursuit of loyalty or ancillary revenue - they need the right equipment to support their efforts, just like I need a nice cup of tea to support mine!

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AIRLINE CATERING INTERNATIONAL



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A no-sugar chocolate treat from Sweet William, for those with special dietary needs



trendwatch

Industry insiders reveal the top trends influencing inflight menu development and cabin service

IZZY KINGTON, AIRLINE CATERING INTERNATIONAL

Investing in presentation

Airlines are making their onboard service more beautiful and memorable. For example, Virgin Atlantic has replaced its salt and pepper sets in its Upper Class cabin with cute chrome pots that together look like a classic cocktail shaker (pictured right). And in economy, the airline has introduced cutlery made from clear purple plastic and a new retro-style usherette tray for serving ice creams.

Meanwhile, Air France has spruced up its inflight menus with various graphic interpretations of the bright red accent in the airline's logo. Intended to pique customer curiosity – and possibly spur an interest in collecting the full set – the menus will be randomly distributed in Voyageur, Premium Voyageur, Alizé and business-class cabins and on long-haul and certain premium medium-haul flights





An increased interest in healthy food choices

Passengers are demanding healthier food on board. "Light meals like gourmet sandwiches and wholesome salads are sought after in addition to the standard Asian and Western entrée options," says Kim Chong, manager of catering services at Dragonair. "To attend to this changing health consciousness, Dragonair has enhanced its meal offerings, with measures such as the use of olive oil-based dressing for salad, the provision of specific guidelines to caterers to minimise the use of oil and salt in seasoning, the avoidance of unhealthy cooking methods and the use of more vegetable ingredients." Others are offering meals specifically labelled as healthy options. On Finnair's longhaul flights from Helsinki, business-class passengers can tuck into pre-ordered 'Wellness and Energy' meals (pictured) that feature Asian flavours and ingredients.

Improving economy-class catering with buy-onboard options

Airlines are now offering buy-onboard alongside complimentary fare to give more high-quality choices in economy. One example is American's collaboration with Marcus Samuelsson for its Main Cabin New American Table menu, which includes sandwiches and crisps (pictured below).

The motivation of ancillary revenue is prompting airlines to pay great attention to quality with buy-onboard options. When Virgin Australia launched Luke Mangan-branded menus and snacks on domestic routes, Mangan said: "This entire distinctive product range is a result



of unique close working partnerships between myself and leading boutique producers around Australia who have high-quality produce."

Low-cost carrier easyJet says its inflight retail provider recently "invested considerable time and resources" to improve its offering, talking to crew and suppliers and studying the airline's destinations. The top three trends identified are a preference for fresh and healthy food with a generous filling; farmhousestyle sliced breads, seeded sliced options, baguettes and ciabattas; and the importance of presentation.

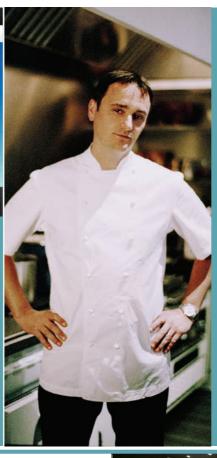
Galley equipment suppliers are stepping up to support airlines' efforts. "Buy-onboard programmes are expanding in the USA and becoming more widely accepted beyond the USA," says Grant West, VP of marketing for interior systems at B/E Aerospace. "While many airlines have reduced or removed galley equipment in economy-class galleys as food service was simplified or eliminated, buy-onboard programmes drive the need to equip galleys similar to business-class cabins. Galley equipment is required to produce higher-quality food and beverage products, allowing airlines to enhance their ancillary revenues."



Migrating menus to the IFE system

A couple of airlines already display their food on IFE portals (flydubai's is pictured above). "An e-menu ensures you can have photographs and full descriptions embedded in the system that you just can't have on a printed menu," says Peter Jones, professor in hospitality management at the UK's University of Surrey and former chair of productions and operations management for ITCA. "For example, looking at the wine list, you would be able to drill down to glean information about the grape types used in production and even pictures and information about the vineyard."

Charles Grossrieder, manager of Cathay Pacific's catering services, believes it is the future: "Over time airlines most likely will move away from paper menus altogether, in alignment with environmental policies."



Leveraging the status of celebrity chefs and big brands

This trend continues apace, with current examples being American's work with Richard Sandoval and Marcus Samuelsson and Hong Kong Airlines' partnership with Jason Atherton (pictured left).

A more unusual manifestation of this trend is EVA Air's decision to plaster three A330-300s with Hello Kitty branding – applying the theme to more than 100 service items. As well as Hello Kitty boarding passes and baggage stickers, on board passengers will discover Hello Kitty headrest covers, tissues, paper cups, utensils, milk bottles, snacks, handwashing liquid, hand lotion, meals and ice cream. Flight attendants wear Hello Kitty aprons and special insignias on their uniforms. EVA also offers Hello Kitty duty-free products.

Demand for authentic local food that flies the flag

Airlines are continuing to use food to reinforce their national identities. For example, Finnair uses "berries from the Finnish forests, wild mushrooms, game and fresh water fish as the focal point of our meals", says a spokesperson. Likewise, Swiss has just launched Swiss Traditions, a new culinary concept for European business class including classic Swiss dishes prepared from original recipes using regional ingredients. Further inflight offerings will have their origins in Swiss national and cultural events such as Zurich's annual Sechseläuten, the Cantonal Yodelling Festival and Geneva's Escalade. The new concept complements the existing Swiss Taste of Switzerland culinary programme, which will now be restricted to firstand business-class on long-haul flights from Switzerland.

Kim Chong, manager of catering services at Dragonair, believes "authentic local cuisines become a key attraction for passengers". But the airline is not restricting itself to Hong Kong-inspired food. "Dragonair flights offer a variety of international cuisines on different routes according to port of origin, such as Chinese, Indian, Thai, Korean and Japanese," says Chong. "These local cuisines help remind passengers of home, and at the same

time introduce authentic flavours or local food culture to visitors."

Chong also thinks authenticity can be boosted through the choice of tableware: "For example, we serve Hong Kong-style hot pot rice [pictured below] in hot pot casseroles, and steamed rice in a rice bowl. Matching dishes and tableware boosts the overall enjoyment of the meal."





Catering for the passenger as an individual

Etihad (pictured) is the latest of a surprising number of airlines to recruit chefs to personalise first-class passengers' meals in flight. Jet Airways is another to allow its First and Premiere passengers to "customise their meals to suit their tastes, choosing exactly what they want to eat" according to Sonu Kripalani, VP of inflight catering at the airline. Meanwhile, British Airways is rolling out customer-service iPads across its fleet. The devices include information on passenger preferences, including special meal requests.

Grant West, VP of marketing for interior systems at B/E Aerospace, points out that airlines will need the tools to support this trend: "In the premium cabin, passengers are requesting to eat what they want, when they want it, driving the need for equipment that provides flexibility in preparing more complex and difficult menus such as steaks, eggs and toast, and to provide regular options when requested."

comfortzone

Airlines reveal the goodies packed into their latest amenity kits – and the luxury brands they're partnering with to create customer satisfaction IZZY KINGTON, AIRLINE CATERING INTERNATIONAL



















1. American Airlines

The airline's latest kits for select international first and business cabins include Dermalogica hand cream, lip balm and moist towlette. The gender-neutral kit comes in black or red and has an Eames Office design. American has also added a quilted bed topper, pyjamas and slippers as part of a new turndown service in international first class.

2. Dragonair

Dragonair's amenity kits feature exclusive designs by French fashion brand agnès b and skincare products from Murad. The kits are available in business class on long-haul and night flights.

3. Oman Air

There are three kits for Oman Air's long-haul flights – men's and women's (pictured) kits in first and a unisex kit for business. The gold-coloured kits were designed by Helios and contain toiletries by Amouage. The contents are enclosed in a gold satin bag with pockets

for each article. Cotton pyjamas, slippers and eye mask are also provided.

4. Austrian Airlines

Austrian's long-haul business-class kits are made from a textile similar to Loden, the traditional clothing of the Alps, and include natural products from Alpienne. Items include mask, socks, ear plugs, lip balm, moisturiser and a seasonal Austrian product.

5. Cathav Pacific

For first class the women's kit (pictured) was designed by Michael Young and Trussardi and features Aesop skincare. The men's kit is by Ermenegildo Zegna with skincare from Acca Kappa. The kits boast biodegradable toothbrushes (and shoehorns for men).

6. airberlin

airberlin offers two unisex kits, one for business and one for economy (pictured), on all long-haul flights. It also has a children's amenity kit on long- and medium-haul flights.

7. Etihad Airways

Etihad teamed with Swarovski for the design of its latest long-haul women's first-class kit, which includes La Prairie moisturiser, hand cream and lip balm. For men it offers a black leather cufflink box featuring Schick Xtreme 3 razor and shaving cream.

8. Swiss

Swiss's long-haul first-class kit comes in a Bally zippered bag and includes moisturiser, eye cream, lip balm and hand cream from La Prairie; plus Kleenex tissues, Mentos mints and other amenities. The airline also hands out pyjamas and slippers.

9. LAN Airlines

On international long-haul flights in Premium Business, LAN distributes a kit containing Bylgari face emulsion and hand cream, Neutrógena lip balm and 3M ear plugs, in addition to toothbrush and toothpaste, shoehorn, a cotton eye mask, socks, a two-sided mirror and a multiuse shoe bag.



2012 is Olympic year for the UK, and flag carrier British Airways is certainly pulling out all the stops to enhance its service and better represent its home nation under the glare of heightened global attention. The airline has pledged a £5 billion injection into its products and services – including new aircraft, cabins, lounges and technologies – over the next five years. The latest fruit of this investment is a partnership with premier supplier Twinings to update a drink central to daily British life – tea.

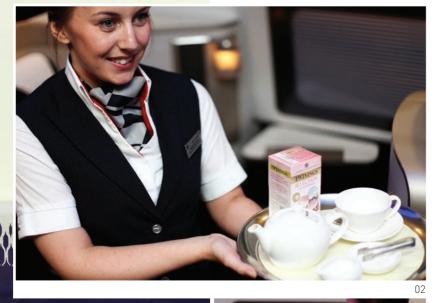
British Airways' Club Europe and Club World customers have been able to enjoy a wide range of Twinings speciality teas, infusions and green teas

01. Twinings teas served in British Airways' new first-class cabin

in lounges and in flight since October 2011, and since the beginning of 2012, a specially selected Twinings English Breakfast blend has been available on all flights – long haul, short haul and domestic. This blend is slightly different to Twinings' regular UK English Breakfast blend, to account for both the cabin environment – where water will only boil to 89°C and cabin humidity and other factors can affect taste – and the wider demographic of international passengers who will consume it.

The golden-coloured English Breakfast is a blend of black teas (in this case from Africa and India), which in the UK, Ireland, Australia and other parts is usually drunk with milk. However, in mainland Europe it is more likely to be drunk without milk, and maybe with lemon instead.

INSIDE INFORMATION This is where Twinings' knowledge of global tea preferences came into play. The company was founded in 1706 with a shop on London's Strand (which is still open), and now sells to more than 120 countries. A team of 12 buyer blenders together taste around 600 cups a day – both trying out new blends and checking produce from various tea 'gardens' (farms) to ensure existing blends taste consistent and good. Provenance is tracked meticulously.





It was this commitment to quality — and corresponding high-end image — that prompted British Airways to make Twinings its sole supplier for tea. "As a premium British company, tea is very much a signature beverage for our customers," says Kate Thornton, head of product and service at the airline. "It is crucial that we consistently deliver high-quality teas across our entire network. With its reputation for quality Twinings was a natural choice for us."

British Airways is educating its cabin crew on the best way to brew it. This advice is delivered in a couple of easy-to-remember bullet points to ensure the majority of people's tastes are catered for. Twinings recommends

brewing black tea for 3-4 minutes, and white or green tea for 1-2 minutes, although it reckons the average consumer only gives it 45 seconds! It also advises consumers to avoid overboiling the water, to prevent loss of oxygen – but of course that won't be a problem in the aircraft cabin. Twinings has launched a new three-pint tea bag for British Airways' economy-class teapots. The tea will be brewed in the galley and poured into passengers' cups at the seat.

The next stage, in April 2012, will see the introduction of a brand new range in first class - Twinings Silk Pyramids, which the company began developing in spring 2011. In addition to English Breakfast, first-class passengers can choose from Earl Grey (a black tea flavoured with bergamot oil), Jasmine Pearls (green tea buds rolled into little silvery balls and scented with jasmine flowers), Mint Humbug (a peppermint infusion), Red Berry Fool (an infusion of cranberry and strawberry) and Honeycomb Camomile (a honey-tinged infusion of camomile buds). With two black tea

Olympic effort

Updating its tea is not British Airways' only effort ahead of the 2012 Olympic Games. Chef Simon Hulstone, artist and designer Pascal Anson and scriptwriter Prasanna Puwanarajah were recently announced as the winners of the airline's Great Britons programme. They were selected as the 'best in British' in the categories of food, art and film and are working with the airline and mentors Heston Blumenthal, Tracey Emin and Richard E. Grant in the run up to the Games to create an inflight menu, artwork for aircraft and a short film, which will be showcased on flights.

Hulstone's "bold British" menu will be served to World Traveller and World Traveller Plus passengers on all long-haul flights from March 2012, while Club and first-class menus will be available on long-haul flights from May 2012. All will run until September 2012. Hulstone will also create a menu for a high-profile pre-London 2012 ball. Hulstone has already been awarded a Michelin star and is head chef at The Elephant restaurant in Torquay, UK.

The airline also updated its champagne and wine lists in September 2011 for the year ahead. The new selection includes Grand Siècle champagne by Laurent-Perrier, which normally retails at £120 and will be available in first class.

blends, a green tea and three caffeine-free infusions, British Airways hopes the range will provide something for everybody. Again each stands up without the addition of milk, in fact milk is only recommended with the two black teas.

The range will be served in delicate silk pyramid bags designed to produce the fresh and rich flavour associated with traditional loose teas within the challenging environment of inflight service. Passengers will be able to brew their beverage fresh at their seat to their exact liking. And for a few months at least, they can enjoy the knowledge that these teas aren't available anywhere else – although Twinings does plan to introduce them to a wider market in due course

The range is still being tweaked, and Twinings and British Airways will test it in flight very soon, but if the current crop is anything to go by, it should be a roaring success.

CONTACTS

www.britishairways.com; www.twinings.co.uk 02-03. Passengers in first class are given individual tea sets

tabletalks

Seat designers reveal the challenges of tray table design and what can be done about them

IZZY KINGTON, AIRLINE CATERING INTERNATIONAL

The tray table is a huge part of the passenger's interaction with the cabin and one that can easily turn sour. Whether it's a lack of space on which to arrange all the little packets that come with the inflight meal (which becomes even more of a juggling act when you factor in IFE paraphernalia and personal items), ineffectual cupholders or even difficulty in deploying the thing in the first place, the tray table can be the focus of many passengers' frustrations, particularly in economy.

What many passengers don't realise is how challenging it is to design a tray table, and how much of a headache they can be for airlines. "It is one of those items more subjected to airlines' analysis and acceptance," says Rodolfo Baldascino, marketing and sales manager at seat manufacturer Geven.

"The tray table design is very important to airlines as they frequently encounter big maintenance issues, especially with cassette tables," elaborates James Park, managing director of JPA. "Common problems tend to be that the tables are heavy, difficult to deploy for the passenger, the mechanism gets broken by passengers and crew and items can get jammed or lost in there. This then causes extra costs for the airlines to fix the problem, not to mention the damage to an airline's image if a passenger becomes dissatisfied if the seat's table is broken or unusable, especially if they are travelling in a premium-class cabin. We try hard to design and engineer better solutions to

make the tables easier to use for the passenger and easier to maintain for the airline."

PREMIUM CABINS In premium-class cabins, designers obviously have more space to give over to passengers, and thus can do more with tables. For example, JPA's design for Cathay Pacific's new business-class seat incorporates a table that deploys horizontally rather than vertically from the centre console to make it easier to deploy and free up space. And on the JPA-designed first- and business-class seats for Singapore Airlines' A380 and Boeing 777 aircraft, the table is stowed under the monitor to make it easy to deploy. "The passenger merely has to pull it forwards and this reduces the usual maintenance issues," says Park. "The design also allows the passenger to adjust the table height and it can track back and forth so passengers can leave their seats whilst the table is fully laden or in use."

One of Priestmangoode's latest projects was the redesign of Lufthansa's continental fleet. "Short-haul flights are a great example where simple design features can improve passenger experience," says Luke Hawes, director at Priestmangoode. "Take the business-class seat for example. It uses the same 3-3 configuration as economy class, but the arms move out to give aisle and window passenger a wider seat. You can then deploy the backrest of the middle seat to create a small 'bureau' or cocktail surface between the aisle and window seats. This enables passengers

to have a place to keep drinks, books or newspapers, whilst maximising their living space during the flight."

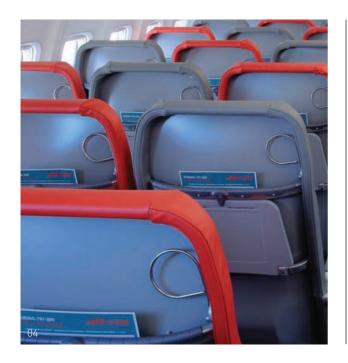
Peter Tennent, director of Factorydesign, is keen to emphasise the importance of not getting carried away with the possibilities. "With the extra space, additional furniture and typically fixed back nature of seats in the premium cabins, the design and integration of the passenger table is less challenging," he says. "Of course, the aim is still to offer the largest, stablest table possible and ease of use is paramount. There is no point integrating a table if the passenger doesn't know how to use it, and airlines don't want their crew having to waste time demonstrating its deployment, so it has to be intuitive."

Geven's Baldascino agrees on this point: "It should not overwhelm the passenger," he says. Baldascino also points to the certification issues in designing tray tables: "What are the customer's qualification requirements? What level of fatigue, abuse and loads does the equipment have to withstand? Is the aircraft type certificate static (CS/FAR 25.561) or dynamic (CS/FAR 25.562)? Is head injury criteria (HIC as part of the CS/FAR 25.562 (j)) part of the aircraft type certificate?"

ECONOMY CABINS In economy, the lack of space makes things even more challenging. "Weight, material, strength and size all need careful attention and solutions are often compromises that endeavour to answer certain contradictions," says Tennent. "Tables







must be rigid and stable, yet be integrated around a moving seatback. They must feel robust and sturdy, yet be light. They must be simple, yet move and fold away."

Hawes points out that access to seats is another factor: "It can often be difficult for window passengers to access their seat if the aisle passenger has their tray table down. So the impetus is on creating a table that makes access easier and maintains living space," he says. "The bi-fold tray table is a good example, where you can still use the table to work and keep a drink, whilst having more space."

Passengers using the flight as an extension of the office is also having an impact on table design: "As increasing numbers of passengers work on flights, it means the ergonomics of the tray table and surrounding features become ever more important," says Hawes.

A common annoyance is when the passenger in front reclines their seat. However, Park believes things are improving: "There is a new trend for the design of a fixed-back seat shell in

- **04.** The Acro Superlight seat designed by Factorydesign
- 05. Lufthansa's continental business-class cabin, designed by Priestmangoode

the cup that cheers?

One way of freeing up room is by adding a cupholder. "If an economy-class passenger wants to store their water bottle or drink and doesn't want to limit their personal space by deploying their tray table then a cupholder is a good solution," says James Park of JPA. "Many airlines request this as part of the design of their economy seats."

Peter Tennent of Factorydesign agrees they have a place: "There are already seat products with cupholders and they work well, even in short-haul product offers," he says. The Acro Superlight seat, designed by Factorydesign for Jet2.com, is one example to sport this feature.

However, Luke Hawes of Priestmangoode is not fond of fold-down cupholders. "They don't last and every time one breaks, specialist engineers have to come on board to fix them," he says. "A better cupholder solution is one that's designed as part of the surface on a tray or armrest. For instance, many bi-fold tray tables have a cupholder designed into the surface when the table is folded. This means you can keep a drink without the risk of spilling it and still have a surface on which to rest a book or computer. You can also have cocktail surfaces with built-in cup holders, although these are more for premium cabins."

economy and a number of carriers have this in service now (Cathay Pacific being one of them). This will eliminate this particular issue."

Baldascino also says that technology is making things better: "Difficulties are usually overcome through market research, experience, customer feedback and especially through the use of software that takes into account the latest human anthropometry."

FRESH IDEAS So if they had the opportunity to start afresh with tray table design, what would designers do?

"We would reconsider the materials used and take as much weight out as possible, simplify the mechanisms to make it easier for passengers to use and reduce maintenance issues, attempt to make tables more rigid and try to maximise the table size in first and business class," says JPA's Park.

"If I were starting afresh, I wouldn't redesign the tray table, I would look at new and innovative methods of meal delivery," says Priestmangoode's Hawes. "I would also look at the ergonomics of

the seat as a working environment and consider a more digital approach to working (for example, tablets) rather than having tray tables. Generally, I think it's more about redesigning the seat to make it lighter, thinner and giving more space to the passenger, than about redesigning the table."

Meanwhile Geven is considering developing additional functions for the tray table. "One of those could be to install provision for advertising/institutional communication from the airlines on the back by means of a special window," says Baldascino.

For Tennent of Factorydesign, the key things are to "get your angles right and beware of stiction overcome by vibration (when that glass of water ends up in the passenger's lap)" as well as to make sure if a cup recess is used then the cup fits it, and most of all, "keep it simple, simple, simple". \subset

CONTACTS

www.factorydesign.co.uk; www.geven.com: www.jpadesign.com; www.priestmangoode.com



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INNOVATIVE GALLEY INSERTS FOR ENHANCED INFLIGHT SERVICE







The onboard food and drink service is just one of the weapons at an airline's disposal in the never-ending battle for the discerning passengers prepared to pay for a seat in a premium cabin.

A popular strategy for raising the profile of first- and business-class culinary offerings is to team up with ground-based celebrity chefs and prestigious restaurants. The symbiosis tends to flourish; with the airline benefitting from the kudos and creativity of a well-known talent, while the chef enjoys the international spread of their image and menus. KLM Royal Dutch Airlines is a recent example, having teamed up with Flemish chef Peter Goossens. The onboard dishes are representative of his three Michelin-star

restaurant Hof van Cleve and are inspired by typical Flemish produce, which is given an international twist. "It is a great honour for me to be given the opportunity to send my creations around the world," said Goossens.

Other recent examples of this approach are Hong Kong Airlines, which has enlisted Michelin-starred chef Jason Atherton for its new all Club Class service from London Gatwick to Hong Kong, launching in March 2012; Virgin Australia's tie-in with Luke Mangan to differentiate its domestic business class; Dragonair's partnership with Jaan Restaurant of the Raffles Beijing Hotel for first- and business-class on flights from Beijing; and American Airlines' collaboration with Richard Sandoval for premium-class

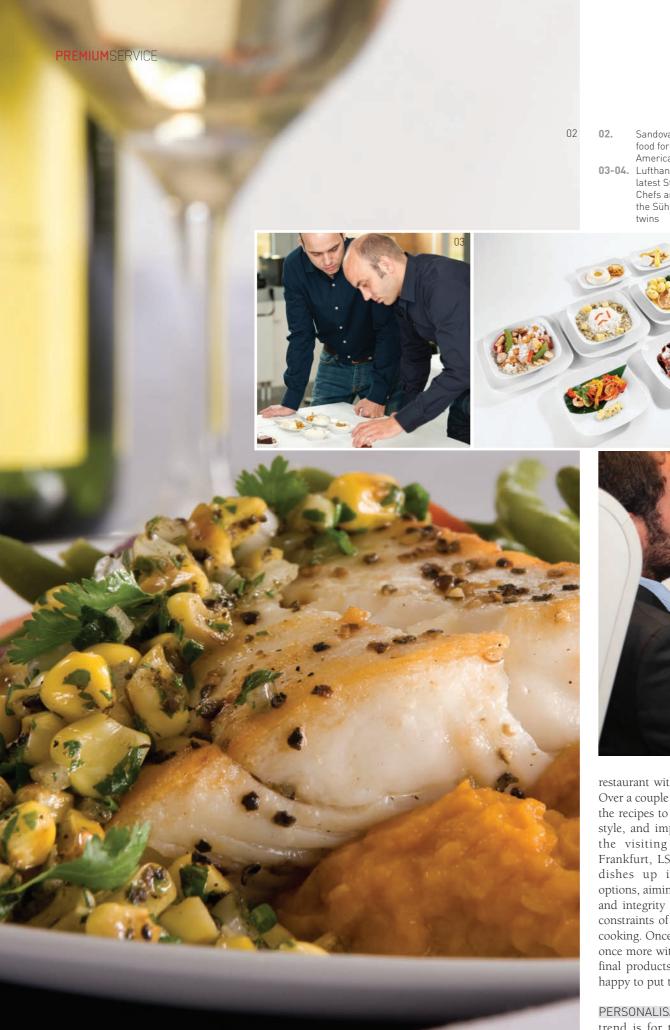
cabins on flights between the USA and Europe, Asia and Latin America. Lufthansa even went so far as to tap into star power with its wine, when in 2010 it started serving a Cabernet-d'Anjou from actor Gerard Depardieu's estate in European business class.

Lufthansa is a regular advocate of this approach, partnering with a different 'Star Chef' every two months as part of its offering in first and business class on long-haul flights from Germany. With its frequent rotation, Lufthansa's aim is to provide variety for regular flyers. In January and February 2012, the chefs in question were twins Thomas and Mathias Sühring.

Each time, Lufthansa's development executives, together with LSG Sky Chefs staff, visit the chosen chef at their



O1. One of Peter Goossens' creations for KLM's intercontinental business class



Sandoval's food for American 03-04. Lufthansa's latest Star Chefs are the Sühring



restaurant with a few potential dishes. Over a couple of days the chef develops the recipes to his/her food and plating style, and imparts this philosophy to the visiting team. On return to Frankfurt, LSG Sky Chefs works the dishes up into practical inflight options, aiming to maintain the quality and integrity of the dishes within the constraints of inflight preparation and cooking. Once finalised, the chef meets once more with the team to ensure the final products are something they are happy to put their name to.

PERSONALISATION Another, growing, trend is for the individualisation of service, where passengers' previous

how premium passengers choose airlines

An interpretation of a 2011 study by the GBTA Foundation - the education and research arm of the Global Business Travel Association (GBTA) - could be that food and beverages play a more important role in airline selection in Asia than elsewhere.

In looking at factors that influenced premium passengers' choices, the Consumer Choice in Premium Air Travel study found that Asian travellers rated superior food and beverage options and high-tech amenities: whereas US travellers prioritised the availability of a premium class of service and European travellers wanted a pre-flight lounge as well as new/modernised aircraft.

The study found that 84% of premium travellers ranked an airline's reputation and safety record as the most important motivating factor for choosing an airline; 67% ranked the availability of lie-flat seats as being an important factor; 51% said that the availability of a pre-flight lounge was a determining factor; and 47% were motivated by the quality or selection of IFE.

The research analysed consumer preferences and motivations for premium air travel, creating profiles by studying the responses of more than 1,650 people from the USA, Europe and Asia-Pacific who had flown in long-haul premium cabins over the previous 12 months.

The study identified three categories of premium air travellers. 'Safe and Sounders' want airlines with a strong safety record and a history of financial stability, preferring airlines with highquality inflight products and services. 'Experiencers' are slightly younger (39 years old versus 47) and look for airlines to enhance the experience. They are likely to change airlines frequently and enjoy flying the flagship airline of the destinations. Experiencers also seek value and are likely to book based on price. Finally, 'Loyalists' like to build frequent flyer points, enjoy flying with their national airline and want upgrades and special treatments.



individualised customer service. Today there are a lot of limits."

British Airways is another airline trying to personalise its premium-cabin service, and has enlisted the iPad to enable it to do so. First introduced to provide IFE on its business-class-only service between London City and New York JFK, pursers on these flights now use iPads that have been loaded with information on passengers in their care. Inflight connectivity also enables the delivery of customer service and flight updates. With the success of this trial British Airways has extended the use of iPads to 100 further cabin crew on other routes. The airline's head of inflight customer experience, Bill Francis, is enthusiastic about the potential: "The iPad is already allowing us to offer a more personalised onboard service," he says. "It allows the crew to offer the thoughtful service they want to deliver and customers are treated as valued guests."

The iPads enable cabin crew to quickly identify where each passenger is seated, who they are travelling with, their Executive Club status and any special meal requests. The adoption of the technology provides a tangible improvement where previously, just before the doors were shut, cabin crew were handed a long scroll of paper detailing up to 337 passengers. Using the iPad, cabin crew will only have to refresh the screen - through a wireless 3G network once the doors are closed - to obtain a full list of passengers.



"The cabin service director on the flight owns the iPad and uses the information to create a personalised and efficient onboard service," says British Airways spokesperson Victoria Madden. "Initial feedback from customers and cabin crew has been very positive. We are always looking at how other industries are using iPads for innovative ideas that we could adopt for the cabin crew iPads."



ARE ALWAYS LOOKING)W OTHER INDUSTRIES ARE

- 05. British Airways crew now use iPads to provide personalised service
- 06. Jason Atherton is working with Hong Kong Airlines

ONBOARD CHEFS Registering special requests made before the flight is one thing, but several airlines are now even enabling premium-class passengers to order personalised food in flight. Etihad Airways is the latest to opt for onboard chefs, with the appointment of 110 fully qualified and classically trained 'First Class Chefs' across all its first-class destinations. The airline requires these chefs to have a minimum of six years' professional experience in five-star restaurants and hotels, although it says the majority of the chefs have at least 10 years' experience, with some even coming from Michelinstarred backgrounds.



"What we have to do is really connect the data in a way to have more

preferences and menu choices are

recorded so that on subsequent flights

the passenger is left feeling personally

into the possibility of recording

information on passenger's wine

preferences, so their favourite bottle

can be waiting for them on board. It's a

service that CEO Christoph Franz

would like to implement across all

classes, but issues such as data

protection and privacy make things

complicated. Speaking at the Digital

Life Design Conference in Munich,

Germany, in January 2012, Franz said:

For example, Lufthansa is looking

attended to and that bit more special.



and seafood, along with a selection of four sauces and four side dishes, all cooked to order. They are guaranteed their first choice of protein and the chefs can also create custom sides and sauces to suit individual tastes.

On applicable day flights, Etihad will also replace its Degustation Menu with a Taste of Arabia menu, which is similarly formatted with a choice of six tasting servings, although all will now have a distinctive Arabic flavour. The airline's À La Carte menu will maintain a similar format – featuring appetisers, mains and desserts - although the dishes can now be adapted with the help of the chef.

"We have consistently elevated our inflight dining experience by putting culinary experts in airline roles as opposed to airline experts in culinary roles," says Lee Shave, Etihad Airways' vice president, guest experience.

Gulf Air is another airline to go down this route. Its 'Sky Chefs' serve tailor-made food and drink options to Falcon Gold fliers not only on longhaul flights but now also on short and medium trips too. The chefs are given hands-on training at Bahrain's five-star Gulf Hotel, as well as within the airport services catering unit.

Meanwhile, bmi offers an onboard chef service on flights to Saudi Arabia; Turkish Airlines has flying chefs equipped with fresh ingredients who "are trained to create delicious meals, despite the limited galley space and reduced amount of equipment" on long-haul flights; Austrian's flying chefs "put the finishing touches to our culinary specialities" while its flying sommeliers help passengers in choosing wines to complement their food choices; and Asiana Airlines launched an onboard chef and sommelier service in first and business class on US (Los Angeles) and Europe (Frankfurt) routes in 2010.

Its clear that to secure the loyalty of discerning passengers, airlines are pushing each other to greater and more personalised culinary heights. C

CONTACTS

www.britishairways.com; www.etihadairways.com; www.flybmi.com; www.gbta.org/foundation; www.gulfair.com; www.klm.com; www.lufthansa.com



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ovenready

The two latest wide-body aircraft programmes have inspired some eye-catching ovens built to new, more stringent standards

BERNARD FITZSIMONS, AIRLINE CATERING INTERNATIONAL

Boeing adopted a new approach to buyer furnished equipment (BFE) such as galley inserts for its 787 Dreamliner, specifying a range of pre-engineered products that could be inspected in its purpose-built Dreamliner Gallery.

With its new A350, Airbus has taken the process further. "There has been a significant change in the industry," says Thomas Lee, business development director for galley insert supplier Monogram Systems. "In the past, when we were dealing directly with the airlines, the suppliers would write a specification for the product,

design the product to that specification and then try to sell it directly to the airlines. In this case, for the first time ever, Airbus wrote the specification for the equipment."

The airframer is trying to raise the bar, he says, "to raise the quality and the maturity of the equipment when it enters service up to the same level as airframe equipment". The result is a more stringent specification and what Lee terms "the highest level of maturity of any galley inserts ever created".

Zodiac Aerospace subsidiary Sell is one of the oven suppliers for the Dreamliner. "For the Boeing 787 we

- **01.** B/E Aerospace's new Essence range
- **02.** The Essence oven from B/E

designed a new range of inserts from scratch, including many advantages," says Manfred Klemenz, director of sales for galley inserts at Sell. "There is a significant gain in empty weight, which is very important to the customers. And we kept the principle of simple operation and top reliability."

More even temperature distribution means all meals come out the same, he says, while a new fan has resulted in a big reduction in noise. "We have the quietest oven in the marketplace," Klemenz says. "The noise level is significantly below the specification and below that of any other available







oven." Sell and the supplier of the fan motor assembly jointly developed a new fan that increases the throughput of air as well as reducing the noise. "It's a specific new development for our ovens," Klemenz says.

Another unique feature is a patented door latch that can be operated with one hand instead of the classic combination of handle plus quarter-turn latch. "It has two independent locking mechanisms as required by the specification," says Klemenz. "We now have two totally independent mechanisms incorporated in the door for double independent latching, but they can be operated with a single hand grip."

Sell's new generation of ovens and other inserts will be available in ATLAS standard versions for existing aircraft as well as the ARINC 810 standard that is mandatory for the Boeing 787, Klemenz says. Meanwhile, Sell continues to produce the classic E-series ovens. "We will continue to

support our customers with those as long as they want them," says Klemenz. "If they are happy with the classic ovens and want to have them in new aircraft to maintain fleet commonality, of course we will support them."

Sell has supplied more than 35,000 of its electro-mechanical convection ovens, Klemenz adds. "What we hear from our customers is that this type is the most reliable oven all over the world," he says. "So many of them like that and of course we continue supporting them."

In addition to the Sell steam and convection ovens, other options for the Boeing 787 include steam and convection ovens from Ipeco and B/E Aerospace and steam ovens from solesource galley supplier JAMCO.

STEAM ENGINE B/E Aerospace took advantage of its selection as insert supplier on the A350 – it is also solesource galley supplier – to redesign its inserts portfolio. The oven in the

03. Sell's latest range of galley inserts

resulting Essence range is a next-generation follow-on from the company's Boeing 787 design, says Grant West, vice president of marketing for insert products at B/E Aerospace. "The core of the unit in terms of functionality is our patented steam technology," says West. "We use a very slight pressurisation compared with some other products, and that gives us a very high food quality. When we do head-to-head cooking tests we find that we always fare very well with some of the more difficult dishes, such as steaks, vegetables and fish."

From a catering perspective the main attribute is versatility, West says: "The pressurised steam technology means you can cook a variety of dishes without flavour and odour transfers. It also gives you very even heating throughout the cavity and you get very solid presentation."

The steam technology also makes it very difficult to overcook a meal, which can happen with convection ovens when, for example, meal service is delayed by turbulence. "Steam allows you a lot more flexibility in terms of timing," says West. "It also gives you a faster cook time than convection."

Another consideration was ease of use. "We spent a lot of time with leading airlines and their cabin services personnel trying to find ways to make the product easier to use and more intuitive, taking out repetitive steps while still providing the flexibility for













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- **04.** Monogram's new oven
- **05.** Airbus's SPICE galley
- **06.** Ovens in Boeing's Dreamliner gallery





chefs to pre-store dedicated menus," says West. "We also integrated the secondary latches in the door handles."

The design goal, according to West, was that "if we had to publish a user's manual we'd failed. We went to colour displays and simplified a lot of the steps. The buttons, the iconography and the legends are all very consistent with consumer home electronics."

The Airbus specification also drove weight and power reductions as well as reliability improvements. Despite the product's reduced weight and power, West says, "all our cooking trials with the new oven show performance as good as, if not better than, the traditional product line."

Monogram's oven for the A350 is the lightest in the world, according to Lee. Weight and power requirements are driven by the Airbus specification, "but even against the other suppliers we have the lowest weight unit in the industry," he says. "It uses less power than any of the ovens previously used. And where it really gets interesting is the performance."

CONSISTENCY The function of an oven in an aircraft galley is to reconstitute food, he says: "It's already been cooked in the caterer's kitchen and in almost all cases it needs to be reheated to a certain temperature for a certain period of time before serving." The most important consideration is the consistency of the meals at the end of the cooking cycle. The difference in temperature between the hottest and



<u>shifting</u> standards

The 40-year old ATLAS and KSSU standards – devised by two groups of European airlines to ease the introduction of the first-generation wide-body airliners in the early 1970s – remain in use today, with ATLAS having become the more common.

For the 21st-century successors to the DC-10, Boeing 747 and TriStar, suppliers and airframers developed two new standards under the auspices of standards body ARINC. The physical interface is defined by ARINC 810, while ARINC 812 covers the electrical interface.

The ARINC devices use a network connector to manage the power supply and communicate built-in test (BITE) data to the aircraft system, says Monogram's Thomas Lee: "We won the exclusive contract to make that for all A350s."

Where ATLAS units can vary in width or depth, Lee says, the ARINC standards impose strictly defined dimensions, so that with the standard interface it should be quick and easy to reconfigure galleys by swapping units.

Airbus is bidding to introduce another new standard with its SPICE concept, which dispenses with trolleys in favour of lightweight containers stowed in 9g-certified, flameproof galley compartments. The SPICE units are designed around the ATLAS tray size so that airlines would be able to keep their existing trays and drawers.

SINCE WE WON A CONTRACT FROM AIRBUS TO DESIGN EIGHT PIECES OF EQUIPMENT, WE NOW CAN DESIGN IT ALL AT THE SAME TIME



coldest meals at the end of the cooking cycle is known as the delta T. "The most common ovens in current use are ATLAS ovens which have 32 meals in them," explains Lee. "We have test equipment that lets us measure the temperature in all 32 meals as they're being cooked and at the end of the cooking cycle. The delta T today in the average oven is around 20°C."

The ideal result, a Delta T of 0°C, indicating no difference between the hottest and the coldest meals, is impossible, Lee says, "but 20°C is far too great. We've got it down to under 8°C, and that's a dramatic move forward in the industry."

Both steam and convection ovens use fans to circulate air warmed by heating elements. "Historically, they move it at a rate of 100ft³ per minute," Lee says. "We brought in PhD-level aerodynamicists to help us with this design, and we have taken it up to 250ft³ per minute." The result is improved consistency and a more optimised delta T.

The performance has been verified in blind tests, Lee says: "They bring all

the suppliers in and bring in exactly the same food from the kitchens at same time, put it in all the ovens at the same time, and for food and taste, visual and temperature consistency we always come out on top."

The fact that the entire suite of A350 equipment is being produced at the same time by the same companies (B/E Aerospace, Monogram and Ipeco), which historically tended to design individual inserts in isolation, has provided an opportunity to harmonise appearance. "You walk into any galley today, it's totally industrial and nothing matches," Lee comments. "Since we won a contract from Airbus to design eight pieces of equipment, we now can design it all at the same time, all to completely match." All Monogram's A350 units use the same human machine interface, he adds, "so once you've been trained to use one piece of equipment you've been trained on every piece of equipment."

MICROWAVE OVENS Monogram's TIA division is the aviation industry's largest supplier of microwave ovens, says Lee,

aesthetic appeal

The new inserts for the A350 are designed to make galleys part of the attraction rather than something best hidden behind a curtain.

Oven doors typically degrade rapidly in appearance, says Monogram's Thomas Lee, with scratches, dents and the unsightly residue of adhesive notes. So the company has developed what he says are the industry's first easily changeable decorative panels.

"First and foremost you can keep it looking brand new," he says. "It also gives airlines the opportunity to change the colour as often as they wish." The panels can be imprinted with the airline's logo, or an image can be spread across multiple panels.

For its Essence range, B/E Aerospace has worked closely with Teague. "We've focused a lot on aesthetics and the ergonomics of the unit," says B/E Aerospace's Grant West.

The first thing passengers see as they board is the door two galley area, and hiding them behind the traditional blind is not really practical before long flights, when the galleys are busy with boarding drinks and hot towels: "A lot of the work went into trying to beautify the galley and most of what goes into the galley as far the public sees are the inserts," says West.

07. Monogram's Symphony suite of harmonised inserts

with more than 5,000 installed and flying, though the vast majority are in business aircraft. "Almost all business aircraft have microwave ovens," he explains, "because you can do meals on demand for a single individual on business aircraft where there's only a few people travelling."

Now Monogram TIA has developed a new ARINC-standard microwave using the size-four dimensions for half-height ovens. "The microwave ovens we build are designed from a clean sheet of paper ourselves," Lee stresses. "We are microwave oven engineers, designers and manufacturers. We do not buy consumer-off-the-shelf equipment and modify it." What Lee describes as the first and only ARINC size-four microwave oven for commercial applications is already certified and flying on commercial A330s. \subset

CONTACTS

www.beaerospace.com; www.ipeco.com; www.jamco.co.jp; www.monogramsystems.com; www.sell-interiors.com

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board as part of the main cabin dining programme on domestic flights over two hours in length. Menu options rotate monthly and vary by flight time, but include a turkey and chutney sandwich and a breakfast biscuit.

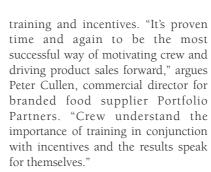
Likewise, Virgin Australia is also leveraging the celebrity chef angle, with those travelling on a Saver fare able to purchase from a menu of snacks devised with Luke Mangan. Meals by Mangan are part of the complimentary service in premium cabins.

Airlines like Delta, while offering selection and payment of meals and snacks on board (rather than in advance), vary their offerings by flight distances and times. Snacks are available for all flights over 200 miles long, but a limited meal selection is only available on flights over 600 miles long. Virgin America has opted for a more high-tech approach – snacks and meals are ordered and paid for directly from the Red IFE system. The only involvement from the cabin crew is to bring the order to your seat.

PRODUCT PRESENTATION As well as food and beverages, airlines are also working hard to maximise duty-free sales. A key way of doing this is by investing in the front-line staff, providing cabin crew with sales



- 01. Samuelssondesigned snacks for sale on domestic American flights
- **02.** Korean Air's onboard duty-free shop
- 03. Korean Air can also sell advertising space in its duty-free shop
- **04.** easyJet's popular bacon baquettes



Other airlines are investigating alternative options. For example, Korean Air has duty-free shops on board all 10 of its A380s. Chris Whetter, project director for AIM Aviation, which was involved in the Sky Shop design, explains the airline's thinking: "They've had to remove 13 seats, so there is a loss of revenue because of that, but they believe they can get increased revenue by selling higher value branded products rather than selling those 13 seats. Also, by selling the advertising space behind key products, they'll gain further revenue."

The duty-free units also offer economies of weight. "Each of the units weighs around 130kg, with the capability of storing around 30kg of goods, so the net weight is slightly less than the comparable amount of passengers and seats," says Whetter.

Where space is more limited, some airlines are displaying their duty-free



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offerings through the IFE system. For example, working with SmarttPapers Aviation, Singapore Airlines migrated its inflight sales catalogue KrisShop to its KrisWorld IFE system, based on Panasonic's eX2 (along with its travel magazine SilverKris and IFE guide KrisWorld) back in July 2010, and has since added other magazines, although it still offers a collection of printed publications as well.

"The e-Magazine initiative offers features such as keyword search, personalised font size, auto-scrolling and different zooming levels to aid reading," says Winston Wei, CEO of SmarttPapers Aviation.

Other airlines are even using the IFE to create advertising revenue from external parties. Bahrain Air is currently using the Thompson Aerospace 1Net solution on a single A319. This AVOD device carries advertising on the IFE screen using a pay-per-click model, with passengers able to opt out by paying a small premium. "Bahrain Air has been able to increase duty-free sales and 80% of the passengers have used either the banners ads or the coupon-enabled map during our trial period. Based on the data we have gained, we expect to be selling the future advertising," says Mark Thompson, CEO of Thompson





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Aerospace. "Based on our data we can assure most single-aisle operators that they will make an additional US\$2 of profits per passenger after installation, and this is after all the costs of 1Net are determined, including system costs, interest, weight and maintenance."

Charging for access to IFE – and in particular handheld IFE systems – remains an important source of additional income for some airlines.

LESSONS FROM E-TAILERS As airlines position themselves more as retailers, their onboard activities should arguably employ similar retail strategies. With the benefit of integrated technology, airlines could also employ more sophisticated techniques, for example, targeted advertising with relevant adverts or promotions displayed based upon passenger profiles.

"I have long advocated that passenger frequent flier cards should contain a profile so that the passenger could run the card on the IFE system and have all services customised, including targeted ads if needed," says long-time IFE consultant Michael Childers. "Something like that will definitely happen."

Janet Titterton, director at Collinson Latitude, also advocates airlines embracing e-tailer practices: "The Amazon model, for example, has demonstrated to great effect that consumers respond exceptionally well to tailored product recommendations," she says. "'Other people who bought this product also viewed these items' is a very simple and powerful technique. With the assistance of emerging technologies, airlines should employ similar tactics."

Airlines such as Air New Zealand and TAP are already turning to established retail strategies such as contextualisation on their booking websites. The contextualisation process works by displaying a product alongside additional, more expensive, options. Additional information describing the advantages of the more expensive options leads to an increase of up-selling.

Airlines could also increase the range and value of their duty-free options with a delivery-upon-arrival service. "Utilising the current duty-free



infrastructure at the airport to fulfil onboard purchases could allow the airline to increase total sales volumes while reducing the onboard inventory," says Michael Planey, an IFEC expert with HM Planey Consultants. "It also reduces the burden on the passenger – having to carry and pack these items while on board. They can simply pick up their purchases after deplaning."

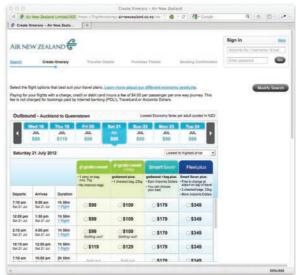
Then there's the burgeoning mobile phone app market, which a growing number of airlines are attempting to leverage as a means of driving ancillary sales. "Mobile channels are another touchpoint through which airlines can reach travellers," says Bejar. "It is still early days in mobile app development for many airlines and travel brands as they figure out how best to integrate mobile into other channels and move the app from being a single-function tool to a multifunctional app that can provide more value throughout the entire travel experience, and, of course, generate revenues along the way."

COPING STRATEGIES GuestLogix, which provides point-of-sale (POS) handsets for many airlines, sees no sign of onboard ancillary sales growth abating. "In terms of onboard payments processed by GuestLogix, we have experienced a steady increase in sales

designing an IFE-based commerce system

There are a number of considerations to take into account to achieve the most effective IFE-based commerce system. "During the flight, the needs and mind-set of passengers will change, so systems that acknowledge and cater for these tendencies can consequently increase the effectiveness of the promotion," explains Derek Ellis, chief creative officer for Massive Interactive. "Passengers alternate between passive and more active modes of interaction and the type of flight – short/long haul, day/night time – combined with the stage of flight, should influence how promotions are featured."

So when should airlines promote particular items? "At the start of a flight, promotions should be kept to a minimum, as this is the peak time passengers engage with entertainment content," says Ellis. "The middle of a night flight provides an opportunity to promote the availability of hot and cold beverages. Towards the end of a flight, passengers will be interested by items that affect or help their onward journey."





05. Contextualisation in use on Air New Zealand's booking website



ANCILLARYREVENUE



SINCE SMARTPHONES ARE BECOMING THE TRAVELLER'S NTERFACE DEVICE OF CHOICE, IT IS THE LOGICAL DEVICE FOR SUCH TRANSACTIONS OO

with a year-over-year increase climbing at an annual basis of 18%," says Brett Proud, EVP for new markets and products at GuestLogix.

So if the quantity and value of transactions carried out on board is likely to increase in the future, are the current hardware systems able to cope and provide airlines with enough security to make the transactions worthwhile? "Currently GuestLogix does not have a cap on transaction amounts," comments Proud. "However, some airlines that implement our technology set a cap-out amount for their duty-free transactions."

With a typical POS system, more transactions in flight can equate to increased risk. "Unless the airline has onboard connectivity and can connect to the ground to verify credit cards, airlines are at risk if merchandise is given to the passenger before the card can be verified," says Childers.

David Pook, director of system applications marketing for Thales Avionics, expands on the inherent issues: "The ePOS systems – as well as credit card readers built into the IFE monitors – are only able to validate that the card is present, the card number appears to be valid for the card type and that there is a valid expiration

date." While the card data provided for a transaction could be compared against an onboard black list of known fraudulent numbers for additional security, there are still, "many holes that open them up to fraud," says Pook.

In terms of facilitating increased sales, reducing fraud and negating the reliance on cabin crew members, NFC is a technology that presents some distinct advantages. "An NFC-equipped phone could have the capability of carrying a monetary balance that is verifiable on the device itself, not requiring instant ground verification. And since smartphones are becoming the traveller's interface device of choice, it is the logical device for such transactions," says Childers.

While not currently standard, many argue NFC will be the best option for the future. "In its report released in June last year, Juniper Research indicated that global NFC mobile contactless payment transactions will reach nearly US\$50 billion worldwide by 2014," says Geoff Underwood, managing director of IFPL.

From a passenger perspective, transactions are simple; they select the product, click pay, 'tap 'n go' the NFC phone (or card) and the transaction is complete. Furthermore, the user can

what is NFC?

Near-field communication (NFC) refers to the use of a radio frequency identification (RFID) chip placed in a mobile phone or credit card, allowing wireless communication between two devices that are very close (near field) to one another.

"Airlines can have NFC on every seat as it occupies significantly less space than the current magnetic stripe readers; and there are no moving parts so it will provide greater long-term reliability than card swipe or chip and pin," says Geoff Underwood, MD of IFPL.

"Contactless technology allows easy connections, quick transactions and simple data sharing," adds Neil Thomas, IFPL's business development manager. "It is also being projected that there will be almost 300 million NFC-capable smartphones by 2014."

enable a code to be entered on their phone first to increase their security.

However, even NFC has its shortcomings, "NFC works in some cases on a pre-paid balance," says Planey. "Most individuals don't carry high available balances and are unlikely to do so with NFC products, thus limiting their ability to purchase high-value goods." So while NFC seems like a panacea for low-value transactions, its relevance for high-value items is more questionable. "If the retailers are looking to increase transactions into the US\$100+ range they will likely run up against the stored-value balance of the shoppers," argues Planey.

Perhaps the only true silver bullet for onboard retailing security is real-time connectivity. "Without that, there will always be a higher risk factor for onboard transactions," says Planey. Thales' Pook agrees: "It will enable the transaction to be validated in real-time, reducing the risk for each transaction." Real-time connectivity would also enable customers to order high-value items on board, have the transaction authorised there and then, and for the order to begin fulfilment while the passenger is still in flight. \subset



CONTACTS

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DRIESSEN

CABIN INTERIORS
Galleys & Equipment



World Travel Catering & Onboard Services

EXPO 27-29 March 2012 Hamburg Messe, Germany

show time

On 27-29 March 2012, food, beverage and amenity suppliers together with airline buyers will gather in Hamburg, Germany, for the World Travel Catering & Onboard Services Expo 2012. The former International Travel Catering Association (ITCA) European tradeshow was acquired by the organiser of Aircraft Interiors Expo in June 2011, and will now be held alongside the successful aircraft interior design and technology exhibition, which already attracts senior buyers from more than 200 of the world's major airlines. Leading industry players including LSG Sky Chefs. Gate Gourmet and Servair are exhibiting along with more than 150 other catering and onboard service specialists. The following pages include some highlights to help you make the most of your time.

The event will also include a conference - a first for Aircraft Interiors Expo - held on Monday 26 March. Speakers include Peter Lewalter, head of cabin interior and IFE at Lufthansa; Arnaud Masson, head of onboard services at Eurostar International; and Brett Proud, executive vice president of new markets and products at GuestLogix.

SERIOUS KIT

La Trousse, a newly created amenity kit, is the result of a development effort led by Jonathan Fourquet of Global Inflight Products (GIP). The kit is designed to be elegant and easy-to-hang, and features custom complementary colours. It is made from waterproof materials to fufil airlines' practical requirements.

As well as amenity kits, GIP also provides inflight porcelain, tableware, plastic and paper cups, glasses, cutlery, catering items, airsickness bags, headrest covers, security seals, blankets, pillows, towels and headsets. The company's continuing objective is to gradually reduce its carbon footprint by transforming standard inflight products into environmentally friendly ones.

FINE VINTAGE

Arnaldo Caprai will promote its Sagrantino 25 Anni wine, the result of in-depth research and careful clonal selection of the best Sagrantino grapes. This jubilee wine was produced for the first time in 1993 to celebrate the 25th anniversary of the winery. Arnaldo Caprai specialises in the production of top-quality Sagrantino di Montefalco, a wine produced totally from grapes of Sagrantino, a variety that's been grown in the region of Montefalco for more than 400 years.



PASSENGER PLEASERS

Global Solution will display amenity kits, branded cosmetics, blankets, head sets, porcelain, linen and disposable products.



SOUND ADVICE

Overseas Trading Development (OTD)

Switzerland will present its latest noisecancellation headsets. It also manufactures amenity kits, porcelain, refreshing towels, oshibori towels and eyemasks.

GRAPE EXPECTATIONS

Wine lovers should head to Vins Biecher's stand. The company supplies in excess of 15 million litres of wine a year. It has three bottling lines, enabling it to offer a wide range of products from bag-in-box to 187ml, from natural cork to screw cap, from glass to PET. The company's portfolio includes French wine regions Alsace, Burgundy, Rhône and the south of France, along with Chile, Argentina, Australia and South Africa.

Jean Biecher & Fils

taste test

Achenbach will welcome visitors with a tasting of the latest gourmet finger food and appetizers created by its chefs. Delice of salmon with smoked potato and rocket mousse, salmon and lime tartar on purple curry mousse in palm leaf, profiteroles and éclairs are just a few of the delicacies awaiting visitors. In addition, the company will present packaging and service solutions developed for the travel catering industry.



individual service

UK-based Mills Textiles – supplier of towels, linens, comfort and sleep items – will co-exhibit with its US-based partner InflightDirect, which supplies headsets, amenity kits and other inflight items.

"Both companies share a very similar supply model that offers direct pricing from long-standing and joint venture factories while still keeping the specialist product knowledge that is often lost when cost becomes the key driver," says Tim Morris, development director at Mills Textiles. "By co-exhibiting, we can offer our customers the chance to discuss a wider portfolio of products in one place and also learn about how Mills Textiles and InflightDirect work together. The lead

executives of both companies have each been supplying the airline and travel sector with their own specialist products for more than 25 years. I've been supplying the industry for 11 years so we like to think we've got the experience side well covered!"

The company prides itself on flexibility. "Some customers request a higher service or supply chain level than others," says Morris. "We make suggestions for efficiencies where we see them, but we do not lead a customer to be supplied in the exact same way or with same product as another just because it might be easier for us."

Warehousing and distribution are also available worldwide.





Stephen White

PRESIDENT OF THE INTERNATIONAL TRAVEL CATERING ASSOCIATION (ITCA)

Why has ITCA handed the event over to Reed?

We had been in talks with Reed Exhibitions for a number of years and we felt that the time was right for the show to be developed and enhanced by the world's largest exhibition organiser for the benefit of our members and the exhibitions visitors and exhibitors. For many years now our members have been telling us that they wanted fewer rather than more events. Our time is more precious than ever and for people to travel the world to visit these events is becoming more and more difficult, time consuming and costly.

We held a two-day strategic workshop in 2011 and we were lucky to have representatives from major companies from all over the world giving their time. This just showed us that there is a desire for the association to develop in the right way and one of the main driving issues to emerge from this session was that the ITCA show and Aircraft Interiors Expo were overlapping more and more. While a number of participants did visit both events it was felt that a whole week could be saved in their busy schedules by attending them in a single location.

How will ITCA be represented at the event?

ITCA will have a stand at the show so that members can meet us in person and I very much look forward to discussing the future of the association with them.

What are the benefits for exhibitors?

We believe that having Reed Exhibitions acquire the exhibition is a fantastic opportunity for the industry, indeed the 2012 exhibition to be held in Hamburg in March will be the largest ITCA tradeshow

in its 31-year history. That is no mean feat in a time of financial uncertainty and recession.

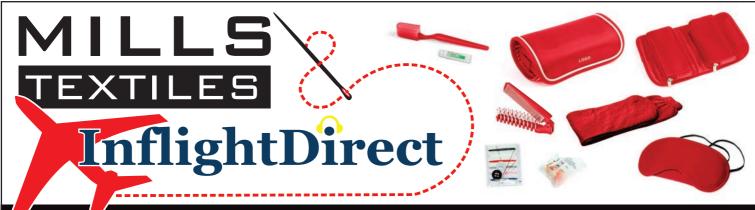
I have always believed that Aircraft Interiors Expo and the ITCA tradeshow are a perfect fit. Galley development, planning and manufacture should revolve around service, cabin crew and the aspirations of the airline's marketing department. It can't just be a manufacturing decision.

How would you like the industry to develop?

I was disappointed that with the development of the new A380 aircraft we managed to design showers but we are still using the old trolley. I believe it is time for the marketing and service departments of an airline to be involved at the start of any new aircraft purchase or design so that improvements to the whole onboard experience can be made. Many changes have been made over the last few years to the quality of food served on board, how is it delivered to the airport and then loaded onto the aircraft, the seat you sit in and the IFE. What is missing is the next step – how service and design can work together; how food and beverages are delivered to your seat; how choice and quality can be maintained and increased. I hope that by holding both very important exhibitions together we will see working partnerships develop so that next time we fly we can experience a real difference at 35,000ft.

What other events does ITCA have lined up for 2012?

ITCA will still be holding its own tradeshow in the Middle East, concentrating on this very important area of growth as well as bringing in exhibitors and visitors from Asia and Australasia. More information on the 2012 tradeshow in the Middle East will be issued shortly. In the mean time I wish everyone a truly successful show in Hamburg. I, for one, am very excited to be a part of ITCA's history – in visiting the largest show in its history.



Mills Textiles

Mills Textiles have been supplying travel textiles to the airline, train ϑ cruise sectors for more than 25 years ϑ our associated supply ϑ joint venture relationships in China extend back more than 90 years.

Our key products include:

Hot & Cold Towels, Tablelinen (Napkins, Tablecloths, Tray mats), Headrest Covers, Pillows & Pillow Covers, Duvets & Duvet Covers, Sleep Items & Blankets.

Mills Textiles offer customers flexible supply solutions ranging from factory direct pricing/supply through to full warehousing θ distribution worldwide.

InflightDirect

InflightDirect has been partnering with the world's leading manufacturing facilities for the past 26 years. These facilities have proven to be the most reliable factories that have supplying the airline industry world-wide with IFE headphones, Amenity Kits, Blankets, Pillows, Pillow covers and other inflight products. InflightDirect represents these factories in order to give our valuable airline customers direct pricing. We provide all of the production, communication, logistical and warehousing needs while giving our customer the option of being invoiced by InflightDirect or the factory. This ensures the most competitive pricing in the industry for these high volume items.



Underneath it all—clean.



When it comes to cabin cleaning, no detail is too small - and every surface matters - our commitment is to keep you on schedule. That's why airlines across the world trust Diversey to deliver the cleaning, sanitation, and hygiene solutions they need. We're simplifying processes, improving efficiency, and delivering the innovative products our customers need to build trust and boost profitability.

We're Diversey, and we're leading the world toward a cleaner, healthier future.

Learn more at www.diversey.com



meals on wheels

Galley equipment supplier **Direct Air Flow** and its manufacturing partner **Korita Aviation** will exhibit their latest range of lightweight trolleys as well as a line of associated products for the cabin interior. Korita Aviation's trolleys retain traditional aluminium profiles, the aim being to ensure strength and durability. The design incorporates a choice of either traditional lever or slam locking systems. Meanwhile, Direct Air Flow stocks galley equipment including trolleys, containers, oven racks and drawers – which are available for immediate delivery.

HOT PROPERTY

Frankenberg will highlight its hot meal expertise, honed from 25 years in the industry. Key products are frozen hot meal entrees, hot snacks and soups for both economy and business class. Frankenberg

offers a wide range of ethnic recipes from all over the world, but customers are welcome to visit the company's product development kitchen to fine-tune their meals together with Frankenberg's six R&D chefs.



PERFECT POURING

August Lundh will highlight its serving jugs, crates and boxes, trays, tableware and other products for the airline and train markets. The company supplies Swedish-made tableware and other accessories that meet strict quality standards. In 2010, August Lundh and Mälarplast began cooperating with SAS for the manufacture of catering equipment for the airline and train sectors – including the "drip-free" serving pot developed by Ergonomidesign for SAS in

1988. More than 500,000 pots have been manufactured and they are currently used by around 30 airlines worldwide.



PAPER TRAIL



FSP will display a range of napkins, including environmentally friendly cocktail napkins made of

100% cellulose brown coffee filter paper (approximately 51g/m²); napkins that can be printed on both sides (up to five colours on the front and two on the back); the Cutnap, a napkin designed to also hold cutlery; the Naptainer, a new kind of packaging for the fast food industry that can also be used as a napkin; and regular napkins that can be printed with up to five colours.

Other featured products include non-skid traymats; hot/cold towels; flame retardant pillow covers; flame retardant polypropylene or non-woven headrest covers (with glued or Velcro strings), pictured; and trolley covers.

FRENCH FANCIES

Servair will highlight its expertise as a leading caterer and cleaning services provider. Within airline catering the French company offers standard and custom-made menus; buy-onboard meals; cultural cuisine (Kosher and Halal dishes); special dietary meals (vegetarian and medically tailored); AB-certified organic menus; international cuisine (Japanese, West Indian, Chinese, Indian, etc); and wine services. The company also offers other types of catering – including for airport restaurants.

Its airport services include cleaning and equipping aircraft; newspaper and magazine services; assistance to passengers with reduced mobility; airport lounge management; duty-free items; and training for airport jobs. It can also help with the development of catering services, technical expertise, airline company management, training programmes for the crew members and purchasing equipment.

In 2012, as an extension of its Culinary Studio, Servair will continue to promote the values of cooking and the culinary signature of its customers. To illustrate this, the company will present its 'book of culinary inspiration' and revisit five global trends in contemporary cooking, as identified by chefs and discussed by some of the top names in French cuisine.



FLYING FRIES

Green Gourmet will launch a new product - It's Just... My Bag of Crispy Fries, the first of a range of hot snacks marketed under the It's Just... brand. Each 120g portion of golden french fries is lightly seasoned and made from specially selected potatoes. There's no need for a fryer as they bake in the bag for 20 minutes in a re-gen oven. The easy-to-open pre-portioned bag is designed to ensure product consistency and reduce mess and waste. Supplied frozen, the product is ideal for backhauling. The company envisages the fries being used as a buy-onboard option; as an accompaniment to business- or first-class meals; or as a complimentary snack.

NOTHING TO LOSE

Spanish-Chinese joint venture **Asian Pioneer** specialises in sourcing, developing and importing products for onboard businesses. The newest of its products on display will be a jug, pictured, that has a lid attached to prevent its loss. The 1.5-litre jug has four content selectors, so crew can easily identify what they are serving without opening the lid. Up to eight jugs can be stored in a single box (standard unit).

Asian Pioneer will also show Rotus, a business-class coat hanger with two number dials to enable crew to make a note of the passenger's seat number; and Newsy, a newspaper-holding cover for trolleys. Versions to fit over both half- and full-size trolleys are available. The half-size one features six dispensers for magazines and six for newspapers. Advertising or the name of each publication can be placed on the transparent window in each dispenser. The cover is assembled by adjusting the velcro strip on the bottom of the trolley. Asian Pioneer says Newsy can be stored inside standard units, trolleys or galleys.



SERVICE SOLUTIONS

Global-C Inflight Solutions will show rotable and disposable meal service equipment; its comfort range of fleece blankets, pillows and so on; and products made from a new environmentally friendly material. Currently it sells to airlines in Europe, the Middle East and Asia Pacific including KLM, Arkefly, Air France, Austrian Airlines, Qatar Airways, Emirates and Kingfisher Airlines.



club together

Attendees will have the opportunity to have personal conversations with International Flight Services Association (IFSA) board and committee members. "In addition, attendees will learn more about the value an IFSA membership provides their company, including how to

collaborate with IFSA to maximise their exposure to key onboard services professionals who are decision makers and airline buyers," says David Loft, president of the association, pictured. IFSA will also share more details about upcoming events, including the 2012 IFSA Annual

Conference and Exhibition, which is co-locating with the Airline Passenger Experience Association (APEX) show in Long Beach, California, USA, on 18-20 September 2012. "This industry 'super show' is the only event of its kind in the USA, and will provide a one-stop shop at which to meet key industry decision makers from more than 40 airlines, and discover the latest trends and developments in onboard food products, packaging and technology from more than 150 exhibiting suppliers and caterers," says Loft. "The 2011 Annual Conference & Exhibition in Seattle, Washington, USA, saw more than 750 attendees – 100 more than in 2010 – and our largest exhibition in comparison to recent years."

IFSA is also working with APEX and Asia Pacific On-Board Travel (APOT) for the 2012 Asia Pacific Conference, to be held in Incheon, South Korea, on 12-14 June 2012.

GREEN GOLD

C.U.FR.OL will showcase its extra virgin olive oil and balsamic vinegar salad dressings, which are served in single-portion miniature glass bottles for first- and business-class passengers. The company is based in the central Italian region of Umbria. It is soon set to launch a 10ml pillow pouch range under the L'Italiano brand for economy class.



BEARING FRUIT

Chiquita Europe will promote its pre-cut fruit assortments. The range of products specifically adapted for air catering is available in a variety of types and quantities. No sugar, preservatives or colours are added. The company also supplies bananas, fruit chips and smoothies.

BIG CHEESE

Bel UK will showcase its full range branded products, which include household names such as Leerdammer and The Laughing Cow. Its portion cheeses can be served as an accompaniment for crackers or bread, either as a standalone snack or as part of a meal, while the Mini Babybel can be served as an alternative snack. Snack packs and other snack options will also be showcased at the exhibition. Several products are ambient, so can be kept non-refrigerated, freeing up space for other chilled products.

ONE-STOP SHOP

Airware – AVV will highlight its services, which span sales, purchasing, supply chain, logistics and storage, consultancy, training and human resources. AVV's products include snacks; staple and ready-to-eat food products; packaged products; beverages; packaging and wrapping products; inflight, train and bus catering equipment and products; and textile products.



Flight Service Products



Cocktail napkins

Napkins - (Printed both sides)

Traymats

Cutnap

Traymats (non-skid)

Napkins

Trolleycover

Hot/cold towels

Headrestcover

Pillowcover

Naptainer



Traymats (non-skid)

Our traymats are absorbent, non-skid, and suitable for all kind of trays. They are made of paper, non-woven, airlaid, with straight or round edges.



Napkins

Our absorbent napkins can be delivered in white, or colored standard sizes. Special sizes and foldings are also available. A print up to 5 colors is possible.



Hot/cold towels

Our hot/cold towels are made of airlaid or non-woven. They are available in different packages, with or without a tongue, with or without a scenting, with or without a flyer. They are soft and absorbent.

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TUTTI PASTA is a company specialized in making deep-frozen ready dishes.

With twenty-five years of experience in the industry, it is one of the leaders in the food service market in Spain.

Its product range covers a wide variety of dishes, including pasta, rice, meat, fish and vegetables. The company is capable of developing many different receipes, hand in hand with the client.

Thanks to the high level of automation in the production process, Tutti Pasta is able to offer the airline catering industry a consistent, quality product, without wastage, nutritionally balanced, all at a competitive price.

Tutti Pasta has a 6,500 m² production plant, with a capacity of 70,000 dishes per day.

The company is certified under the quality standards of ISO 9001, IFS higher level and BRC grade A.

















More info: inflight@tuttipasta.com

www.tuttipasta.com



LSG Sky Chefs'
ideas aim to
reduce fuel burn
while enhancing
the passenger
experience

Cheryl Armstrong +49 6102 240 856 cheryl.armstrong@ lsgskychefs.com Reader Enquiry No. 501

balancingact

With weight reduction very much the focus when it comes to new onboard innovations in the airline industry today, one of the world's largest airline caterers and provider of integrated inflight services says it is managing to reduce weight for its customers while also enhancing the passenger experience.

As part of a global initiative that promotes reduction in utility usage, wastage and weight on board aircraft, LSG Sky Chefs currently has a dedicated team analysing the entire passenger travel chain – from ticket purchase to disembarkation – to see how it can help airlines to improve their overall brand experience and make it as seamless as possible. Touch points along the chain include everything from pre-ordering meals and retail products to branded lounge management, onboard retail and catering.

"Reducing weight on board is obviously high on our agenda, just as it is for the entire industry, however it's not the only thing we are focusing on," comments Michael Wahl, vice president of product marketing at LSG Sky Chefs. "It's our responsibility to make sure that both customers and passengers are happy. This means that whenever we identify a potential saving we have to assess it against the impact on the passenger experience and the supply chain. Only then can we clarify if it is a saving worth pursuing."

Not surprisingly, it is on board where the most tangible innovations from LSG Sky Chefs can be seen. When the lightweight Quantum trolley was introduced in the market, for example, its creators (LSG Sky Chefs and Norduyn) promised weight savings of more than 35% over standard aluminium models, as well as a longer life and easier servicing.



Lessons from the Quantum development have since been used by LSG Sky Chefs as the basis for the design, development and sourcing of a completely new range of products that aim to reduce the weight of the average fully loaded trolley considerably. On an A380, the company says this adds up to weight savings of well over a tonne, which over the course of a year could mean considerable fuel savings for an airline.

ADDED VALUE

Reducing weight is not LSG Sky Chefs' only design goal. "All these new products offer an extra dimension on top of weight savings," says Dirk Mulzer, managing director of LCL, LSG Sky Chefs' equipment and logistics division. "The Quantum trolley is easier to manoeuvre and can be painted according to an airline's wishes. Our lightweight tray set-

ups are available in new designs and colours and have less environmental impact than rotable cups, plates, dishes and trays. Our polypropylene glass racks can be ordered to suit different glass sizes and ensure fewer glass breakages. And our polypropylene drawers make less noise when opening and closing and have a much longer lifespan."

Within its buy-onboard offering, LSG Sky Chefs is also looking to innovate from a number of different angles. "A lot of airlines are offering buy-onboard schemes, and that means sourcing, storing, loading, transporting and in some cases even disposing of around 65% more products than they actually need," says Robert Illston, the company's operations and business development director for buy-onboard. "By reducing this to fewer, more relevant and more desirable products, there is less weight, wastage and packaging, and the

passengers get to choose from a branded offering that appeals to them."

Of course, all of these innovations require effective operations. This is an area that LSG Sky Chefs has put a lot of effort into, particularly through strategic partnerships like with SkylogistiX, a joint venture with Kuehne + Nagel. "We have gone to incredible lengths to make sure the processes are in place that will enable us to achieve excellence in all areas of our business, both at the front and the back ends," says Alexander Kolf, managing director of SkylogistiX. "It's a matter of assessing resources and asking ourselves if we can do something better, and if so how. In most cases this can be achieved through our existing network, or whenever necessary we will identify the right partners to achieve our and the customers' goals. Everything we do is about achieving the right balance."



In creating its latest galley inserts, Sell had a lot of demands to cater for

wishlist

Sell delivered its first galley in 1955 to Deutsche Lufthansa. Suddenly, passengers didn't have to go without freshly brewed coffee and tasty food. But to achieve this new onboard service, a completely new food supply chain and range of equipment had to be invented. How do meals for hundreds of passengers get into the aircraft? How is all this food stored, kept fresh and heated up at the required time?

For galley insert manufacturers, the challenge nowadays is to ensure a service that makes the passenger feel comfortable; create a safe environment for the service crew and passengers; and save fuel through weight reduction. As well as embodying new technologies and functional requirements, Sell says its galley inserts also have to have an advanced aesthetic, to fit the rest of the cabin. Another important goal with its latest inserts was to make sure they complied not only with the ARINC standard, but also with the ATLAS standard, to allow for compatibility within airlines' existing fleets.

"The challenge when we designed our new ovens, coffee makers, beverage makers, water boilers and bun warmers, was to combine form and function with the increased functionalities required by airlines today," says Jürgen Just, vice president of marketing and sales at Sell. "An insulated serving pot, a steam oven without internal

over-pressure and an oven door with double safety latching that can be operated using just one hand – these are just some of the advantages of our new inserts."

Needless to say weight savings were also important for this latest generation of galley inserts. "Having 30% less weight, our oven brings the customers fuel savings of thousands of dollars – per insert," says Just.

Additionally, Sell says sophisticated closing mechanisms, low touch temperatures and fast operating cycles make its galley inserts easier to use for crew. To address safety requirements there is over-heat protection.

"The increased functionalities of Sell's inserts ensure the customers get the best taste out of the food and beverages on board," says Just. "Smelling freshly brewed coffee makes the passenger feel comfortable, just like at home."

Looking to the future, Just predicts demand for standardised, pre-certified galleys and innovative interior concepts, and says eco-efficiency and eco-meal preparation will be key issues for cabin interior suppliers. "Sell is uniquely positioned not only to meet these advanced requirements but to set and lead new standards," he says.

Sell will exhibit its products on Zodiac Aerospace's stand at Aircraft Interiors Expo 2012, to be held in Hamburg, Germany, on 27-29 March 2012.

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At Mars, we are in the chocolate business, and enjoying chocolate is something we want people to feel good about. That's why, whilst we will never compromise on taste, we are also committed to making our products even better. We have invested millions of pounds and thousands of man hours to reduce the saturated fat in our bars, whilst keeping the taste absolutely the same. We are proud to be the first chocolate company to achieve this. Mars, the nation's favourite bar, now has 45% less saturated fat (per 100g) than the average of the top 25 chocolate brands. Raising The Bar





The Quodpod
Meal Box is
now keeping
children happy
on Gulf Air
flights

littletreasure

The Quodpod Meal Box has now begun inflight service. In November 2011 a six-month trial got under way with Gulf Air, where the boxes are used for the children's service on selected international routes.

"This is a chance for us to demonstrate the tangible benefits and ease of handling, both on the ground and in the air," says Katie Davidson, managing director of Quodpod.

The company reports that initial feedback has been very positive. A survey conducted by the airline in December 2011 showed an approval rating of more than 80% for both the look of the Meal Box and children's reactions upon receiving it. In fact, it is so popular that parents have been asking to purchase the boxes for their children to use at home.

The launch of the trial coincides with Gulf Air's renewed emphasis on child wellbeing in the cabin. A fleet of professional Sky Nannies will soon take over the children's meal service and Davidson says she has already been impressed with the way the crew have supported the product.

"The crew are an integral component of our offering, not only embracing the airline's newest products and services but proactively adapting and evaluating them too," says Marcus Bernhardt, Gulf Air's chief services officer. "Feedback has been overwhelmingly positive on the Meal Boxes both from the Gulf Air team and passengers."

At time of going to press Quodpod Meal Boxes were being used on three international routes: London Heathrow, Paris and Frankfurt. The trial will expand to take in Bangkok, Rome and Kuala Lumpur by the end of March 2012. These represent the international routes with the highest number of young passengers for Gulf Air.

The meals themselves are designed by the caterer in each destination, using the four ovenproof disposable dishes that fit inside the pods. The lunch menus shown are designed by BAS, while LSG SkyChefs, Do&Co and Servair have each added their own twist for their respective routes.

Davidson is relishing the opportunity to add excitement and surprise to children's flights. She explains that one of the main drivers for the original design was to infuse the feeling of theatre back into cabin dining, and to give passengers something a little unexpected. "It's a great concept; the kids definitely prefer the new meal boxes to the old cardboard ones," says Sky Nanny Judith.

With the Meal Boxes in the air, Quodpod has started to design new products for its portfolio. One of these is a MiniMeal Tray – a lightweight and reusable solution for the 1/3 meal tray, using the Quodpod styling. This will be on show at the World Travel Catering and Onboard Services Expo 2012.

The company is also expanding into the children's activity pack market. "We believe that capturing a child's imagination through a coordinated suite of unique catering and activity products will help to create brand loyalty in future years," says Davidson.

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Kids Meals with a Fun Twist



tel: +44 (0)845 2268 048

01. The Hybrite trolley

02. The new Hybrite container

A new range of stylish inflight containers from Driessen brightfuture

At 2011's Aircraft Interiors Expo, Driessen-Zodiac Aerospace launched its Hybrite trolley line, a stylish and colourful range that garnered both critical and commercial success. Now the company is following up with a line of containers for onboard storage and catering.

Containers – sometimes referred to as standard units or boxes – are used for the mobile storage of food, beverages and condiments in the galley, and have runners to accommodate both trays and drawers.

Driessen started designing the containers in early 2011. The design was led by customer requirements – a more modern look and feel, weight reduction, improved maintenance, improved ergonomics and crew handling, as well as the durability and product quality the company prides itself on.

Production of the first batches will start in April 2012. "Even before the launch, the new container has been selected as seller-furnished equipment (SFE) for a new extra-wide-body aircraft soon to be introduced," says Michiel Maris, sales and marketing director at Driessen.

The container comes in ATLAS dimensions, but Driessen can adjust it upon request. Maris reveals that a 10% weight reduction was achieved (the product weighs 2.6kg) while also improving stackability (through

new stackable ribs), durability (through integrated hinges, rounded corners and a flush top handle) and maintainability. Other enhancements include a new slam latch developed in cooperation with airline crew for ease of opening and closing.

To transform the container into a stylish cabin accessory, Driessen poured most of its design efforts into the visible part of the unit, producing an elegant front panel design with rounded corners and a smooth surface. Similar to the Hybrite trolley, the door panel can be powder-coated in any colour or used as a canvas for the airline's branding or other illustrations. Meanwhile the new lock design has a curved flow. While the container body is made of aluminium, the handles and lock are made of composite material for an ergonomic, soft touch. User-friendliness was addressed through the development of onefinger opening, so the door can be unlocked and opened in one movement. Crew can use the handle from above, below and the side, even in a 270° approach - important when containers are stored above the head, at floor level or in a difficult-to-reach location. The cup behind the latch is designed to direct the hand in a smooth and natural flow.

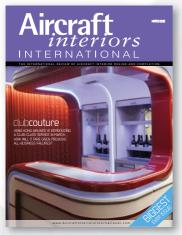
The product will be on display at Aircraft Interiors Expo in Hamburg, Germany, on 27-29 March 2012.

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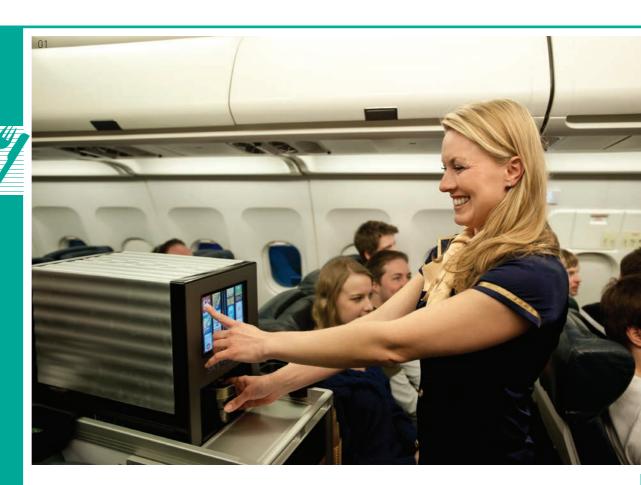
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The Sky-Tender trolley is not the only passengerpleasing product Sky-Max has to offer

modernconveniences

Oliver Kloth, managing director of SkyMax, is convinced that if airlines want to enjoy commercial success they must operate in an environmentally friendly way. "Today's airlines need products that enable them to work in an efficient manner and that continuously improve comfort for passengers and crews," he says.

Over the past few years, SkyMax has made a name for itself in the development of sustainable concepts. "We provide airlines with what they need and we place the greatest value on passenger comfort," says Kloth. Recently the company has expanded its product range.

The Sky-Tender, developed with Air-Eltec Luftfahrttechnik, is an automated beverage trolley that can prepare up to 20 different drinks – such as tea and coffee, fruit juices, soft drinks, mixes, beer and wine – at the touch of a button.

Virtual tests were conducted by a European aircraft manufacturer in December 2011 to trial the Sky-Tender. Cabin crew tested the handling in a cabin mock-up. SkyMax reports

that the trial run was flawless, so the inflight testing phase will begin in spring 2012.

Right up until the trial, Air-Eltec was optimising the technology. For example, the original 10 syrup pumps and corresponding valves were redesigned as 20 substantially smaller pumps. This way, the cabin crew can tap the same drink at the same time from both sides. This is designed to save space, reduce weight, increase reliability and facilitate fast and efficient service. Measuring turbines were installed so that the various types of water (hot, cold, with and without CO^2) can be measured more precisely. Preparation of CO_2 in the carbonisator was replaced by another model with measuring probes for better results.

"Depending on the flight profile and aircraft type, weight can be reduced by 20-60kg per flight," says Kloth. "This means lower fuel consumption and as a result less carbon dioxide being emitted. Furthermore, the Sky-Tender decreases the amount of waste involved, thereby helping to reduce fees."

SkyMax +49 05111 659 510 info@skymax.eu Reader Enquiry No. 505 The product uses a bag-in-box system, so only the collapsible beverage bags remain, which can be disposed of via the recycling system, in addition to the rechargeable ${\rm CO_2}$ cartridges. "These take up considerably less space than conventional empty containers," says Kloth. "Since fewer beverage trolleys are necessary, airlines save a lot of space."

GLASS LAMINATE

Other new products from SkyMax include Light Glass, a glass laminate composed of a high-strength interlayer and extremely thin panes of glass. The company says it is practically half as light as conventional glass and boasts very high scratch resistance, the highest degree of splinter binding and an excellent structural capacity. It can be used for partition walls, doors, shower cabins or mirrors. "With a thickness of 5.34mm for example, and weighing 6.86kg, it is practically as light as the polycarbonate used in aviation, but its properties are considerably better," says Kloth.

The company also offers headphones ranging from economy models up to first class, from passive disposable in-ear buds up

to active noise-cancelling headphones and also for the INCAM system. The headphones, which have been in airline use for 10 years, are now complemented by corresponding plugs from IFPL, designed to minimise the time-consuming work of replacing them.

ELECTRONIC CIGARETTES

SkyMax can also make it possible for passengers to puff away on the aircraft – using the electronic cigarette by Fumidus. "Those who wish can have their own Fumirette designed any way they like – snake leather, sterling silver or special engravings – the sky's the limit," says Kloth.

Often airlines find the Fumirette 2go the most suitable model. It is an electronic disposable cigarette that promises a turnover of €10 on 3cm². Fumidus does not fall under the smoking ban as it is free of fumes and cold smoke. "These special airline variations produce very little steam, are silver coloured and have a visible blue LED to reassure other passengers they are not real cigarettes," says Kloth. "Fumidus products are not lit, do not burn tobacco and are absolutely odourless and free of harmful substances." ⊃









Continuous R&D
at Monty's
Bakehouse
yields a steady
stream of new
ideas for hot
snack products
and packaging

hothouse

UK-based Monty's Bakehouse was founded in 2003 and offers a wide range of hand-held snack foods provided in ovenable packaging for inflight service. It is now planning to expand its range to include new bakery and snack items, all of which will be exhibited at the World Travel Catering & Onboard Services Expo 2012 (to be held alongside Aircraft Interiors Expo in Hamburg, Germany, on 27-29 March 2012).

The company has built its brand on the use of the freshest ingredients available. Its founders have always believed that great food is only as good as the ingredients used, hence why it will only use ingredients that you would find in any good kitchen cupboard. It's a principle that is at the heart of everything Monty's Bakehouse does.

Now boasting a dedicated fully accredited production facility, Monty's Bakehouse continues to pursue the highest quality standards, all delivered with the same passion and commitment it has become renowned for. This uncompromising approach to product

quality includes positive release systems and a wide variety of independent testing on packaging reheat and ink migration. Indeed, Monty's Bakehouse has won many awards in its short history – its most recent being the prestigious UK Baking Industry Award for Customer Focus.

"Monty's Bakehouse has supplied the travel catering arena for almost 10 years, and we have built a reputation as a reliable supplier of high-quality and innovative hot snacks," says Matt Crane, who runs the company. "We're not complacent though; we still feel there is a lot of scope to innovate within the snacking category. This year will be a year of challenges for everyone in the industry. We continually task ourselves to keep coming up with new ideas to stay ahead of the competition. We pride ourselves on the excellent quality of our products and the development of packaging designs to keep life for caterers and cabin crew as easy as possible."

A good example of these principles in practice is the company's range of special

Lucy Stowell +44 1342 894 730 lucy.stowell@ montysbakehouse.co.uk Reader Enquiry No. 506 meal options. "The packaging we have designed makes it immediately obvious to the crew which special meal option is which, saving time and effort in the meal service," says Crane.

Monty's Bakehouse maintains state-of-the-art new product development (NPD) kitchens, where its development chefs and NPD team work constantly to produce new ideas. Ovenable and microwaveable bagels are the latest addition to the company's range. These were revealed in October 2011 at Anuga Cologne and include fillings such as roast beef and caramelised onion, scrambled egg, mushroom and smoked cheese and roast chicken and smoked bacon. These fillings take 90 seconds to heat in the microwave from frozen.

The company also manages the distribution of its own and other frozen products to airlines in more than 20 destinations across Europe. This supply chain is orchestrated from the company's fully accredited warehouses in the UK and Germany. The in-house logistics team also manages container exports to the Middle East and USA.





Monty's Bakehouse will bake a full range of its products for visitors to sample, every day during the World Travel Catering & Onboard Services Expo 2012 (hall B4, stand 4C20).

01. A pizza sub

02. One of the new microwaveable bagels

03. A clearly labelled special dietary meal

Monty's bakehouse



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A no-sugar chocolate treat for those with special dietary needs

sweettreats

Australian chocolate company Sweet William has developed the Sweet As no-added-sugar 10g mini bar as a convenient treat after a meal or to accompany coffee or tea. Sweet As was originally launched as a range of 100g blocks to target not only the estimated 194 million people worldwide with diabetes and prediabetes, but also those looking to reduce sugar and carbohydrates in their diet.

Sweet As is designed to cater for the majority of people with special dietary and cultural needs. In addition to having no added sugar, Sweet As is dairy free, gluten free, nut free, kosher (pareve), halal and vegan. Sweet William says the product also contains no artificial sweeteners, flavours or colours; boasts a low GI (under 20); is diabetic friendly; cholesterol-free; gluten-free; and low in carbohydrates (under 1g impact carbs per serving) with no trans fats or GMO.

"A growing number of travellers have come to expect that their special dietary requirements are met and Sweet William has the experience and facilities to cater for these needs across all parts of the globe," says Carol O'Halloran, who is responsible for sales and marketing at Sweet William.

Sweet As uses all natural ingredients, including the popular natural sweetener

Stevia, which was approved in the EU in November 2011. Sweet As is designed to taste like regular chocolate and won the 2010 Confectionery Division of the Australian Food Challenge Awards.

Sweet William produces a wide range of chocolate bars, blocks and spread and bulk cooking chocolate chips and couverture buttons for food service across the globe. A variety of bulk formulas are available, including original, dark and the very popular white dairy-free chocolate. The company also makes seasonal items such as individually wrapped Mini Bunnies for Easter and Mini Santas for Christmas, to cater for travellers in the peak holiday seasons. The packaging can be altered to meet airlines' additional language requirements.

Sweet William has a totally dedicated facility and implements strict procedures and cleaning methods for its machinery to ensure its products are free from allergens. "This ensures peace of mind for people dealing with allergies and food intolerances and provides a reliable snack option for inflight food service," says O'Halloran.

Sweet William is currently sold in supermarkets, health food stores and pharmacies in 13 countries throughout Southeast Asia, Australia and the EU.

Carol O'Halloran +61 293 167 177 caroloh@sweetwilliam.com.au Reader Enquiry No. 507







Our pick of the best inflight teddies for sale in 2012

1. Lufthansa Steiff Bear

18cm genuine Steiff teddy bear; £24 (US\$38)

2. Virgin Atlantic Pilot Bear

20cm bear dressed in pilot uniform; £13 (US\$20.50)

3. Dragonair Dragon

6in Year of the Dragon celebration soft toy; £6.95 (US\$11)

4. KLM 'Miffy'

Miffy soft toy in KLM cabin crew uniform; £16.50 (US\$26)

5. Gulf Air Bear

Fluffy bear in Gulf Air stewardess uniform; £12.60 (US\$20)

6. airberlin Singing Bear

28cm bear that sings 'You Are My Sunshine'; £6.65 (US\$10.50)

7. Air France Captain Bear

22cm plush bear with embroidered pilot cap; £20 (US\$31.50)

8. Cathay Pacific Pilot Bear

20cm soft bear in traditional pilot outfit; £9.70 (US\$16)



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In addition, the bent rim creates a stronger structure allowing for lighter weight and lower cost per cup.

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