桃園國際機場

飛・行業

TATYUAN Airport Review



疫後飛行先刷臉

The Era of Smart Movement Approaches

Post-Pandemic Air Travelers Will Start Journeys by Scanning Their Faces

工程建設創新頁

南跑道及第三航廈進度邁大步

Construction Projects Reach New Milestones

South Runway Reopens and Work on Terminal 3 Pushes Ahead



Connecting the World with Heart

桃園國際機場公司發行 季刊

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安全與創新 讓智慧機場更有溫度

TAOYUAN Airport Review **Safety and Innovation** Giving a Smart Airport Warmth

確保安全與持續創新,是桃園國際機場不 斷發展的養分,更是推動智慧化服務不可缺少 的核心關鍵。

這些年來,我們試圖在機場的安全、服務、 營運等面向陸續加入最先進的科技發明,包括 運用最新生物辨識技術的報到通關服務,讓旅 客從刷臉報到開始,就可以讓自己的臉成為獨 一無二的「One ID」,再搭配行進間即可辨識 臉部特徵的第三代自動查驗通關系統,以兼具 安全與服務的方式,縮短旅客通關到登機的時 間。另外在提升網路速度、科技防疫等旅客服 務上,也都看得到桃機創新智慧的元素。

把過去的不可能變成可能,是各國標竿機 場大步向前的時候,最大的挑戰與嘗試,更是 一種創意無限延伸的樂趣,而桃園國際機場在 推動智慧機場的過程中,最重視的是如何從需 求出發,為旅客的機場體驗加入溫度,讓科技 運用成為以「人」為本的服務

在打造智慧化機場的同時,我們將以服務 為先、安全至上為宗旨,導入更多創新技術以 滿足旅客的需求,創造新奇又溫暖的機場體驗。

Taiwan Taoyuan International Airport (TTIA)'s continual development is powered by an unrelenting focus on safety and innovation, which are also indispensable keys to realizing the "smartification" of the

In recent years TTIA has worked time and again to put advanced technologies in the airport's security, service, and operational systems. For instance, we have installed the latest biometric technologies for checking in and boarding. These innovations allow travelers to start the document inspection process by scanning their faces, thereby allowing an individual's face to serve as their unique "One ID." In addition, the airport's automated border control system can recognize the faces of travelers in motion. Emphasizing both safety and convenience, facial recognition reduces the time necessary for travelers to board their flights. TTIA's smart innovations can also be seen in recent measures taken to raise Internet speeds at the airport and to use technology to strengthen protections against COVID.

Every benchmark airport strives to make the impossible possible. Such an endeavor presents enormous challenges and demands constant trial-by-error as well as boundless creativity. In the process of promoting the "smartification of the airport," TTIA is most concerned with increasing the warmth of travelers' experience of the airport. It starts with a focus on traveler needs and with employing technology that puts people at the center of the airport services.

As we create a smart airport, we are starting with a service orientation and putting safety first, introducing more and more technological innovations to satisfy the needs of travelers and to foster a warm and novel airport experience.





▲ 未來,已於報到時參加 One ID 試辦計畫的旅客,可直接刷臉通過安檢口並測量額溫(人臉辨識成功畫面為示意圖)。
Travelers who already joined the One ID pilot project at check-in will be able to scan their face to pass through security checkpoints and measure their temperature (schematic showing a successful scan).

從舊金山到雪梨、從東京到杜拜,世界各主要機場或航空公司近幾年紛紛導入人臉辨識系統,展開無接觸通關 試驗,而桃園國際機場也規劃將於今(2021)年12月中試辦「One ID」智慧通關,讓旅客從報到之後,只要 秀出一張臉就可以完成安檢及登機等手續。

深夜裡,在舊金山國際機場的登機門前,準備搭乘中華航空及長榮航空飛往臺灣的旅客,依序排隊把臉對準登機櫃檯前方的人臉辨識儀器進行掃描,當畫面出現綠色勾勾後,工作人員就會說一聲:「歡迎登機!」目送旅客踏上空橋,完成登機手續;而法蘭克福及慕尼黑機場建置的生物辨識系統,則由星空聯盟旗下的漢莎及瑞士航空於 2020 年 11 月率先試辦。

生物辨識具唯一性 One ID 試辦即將啓動

由於國境移動特別注重旅客身分確認,而生物辨 識在身分識別上更具有安全性和唯一性,因此桃園國 際機場積極引進人臉辨識智慧通關系統,將可在旅客 報到時整合護照、登機證及臉部特徵等資訊,以「臉」 作為通關流程的單一身分證件—One ID,進行接下來 的通關程序。

試辦時期將在人工及自助報到櫃檯各設置兩座 機臺供旅客建立資料,或者可在安檢閘門前加入試辦 計畫。為了加強防疫,機場公司業務處處長劉曉萍表 示,安檢口的機臺也另加設體溫量測,未來旅客在每 一道關卡都可無需脫下口罩,即直接進行辨識。

安全刷臉,個資保護優先

至於在各國都引起討論的個資安全問題,「安全性絕對是我們的第一考量」。劉曉萍指出 One ID 系統符合國際航空運輸協會定義之機場傳輸安全標準,也會遵守桃園機場資通安全作業規範之網路、系統等資訊安全作業。

以目前各國試辦情形來看,One ID 在疫情期間可有效降低人員間接觸,並提升通關服務效能及改善旅客體驗,桃園國際機場也歡迎旅客加入試辦計畫,享受「刷臉」走遍天下的快感。

From San Francisco and Sydney to Tokyo and Dubai, the world's major airports and airlines have one after another been putting in place facial recognition systems, thus facilitating contact-free inspection of documents. Taiwan Taoyuan International Airport (TTIA) likewise has plans for a One ID pilot trial for SmartPath Service in December, which will allow checked-in passengers to pass through both security checkpoints and boarding gate by just showing their faces.

Late at night, at a boarding gate in San Francisco International Airport, travelers preparing to board China Airlines and Eva Air flights to Taiwan are lining up to have their faces biometrically scanned in front of the boarding gate. After a green check mark appears on the screen, ground staff say, "Welcome on board!" and the travelers step onto the air-bridge to get to their seats. Meanwhile, Lufthansa and Swiss Air began their pilot trials on Star Alliance Biometrics in the Frankfurt and Munich airports in November 2020.

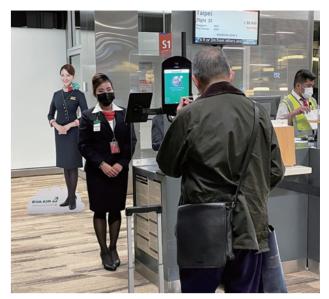
One ID Biometric System Trial Nears Launch

Because particular attention is given to traveler identity at national borders, and because biometric identification is safer and unique to an individual, TTIA is actively introducing a SmartPath system using facial recognition that will integrate information such as passport, boarding pass and facial features. It will turn a traveler's face into their "One ID" - the only thing they need at each airport touchpoint.

During the trial, there will be kiosks where passengers can upload their data - two each at both the manual and self-check-in counters to join the trial. Travelers can also participate in the trial in front of the security gate. According to TIAC's Business Department chief Liu Hsiao-ping, temperature checks have been added to the facial recognition system at these kiosks as an epidemic-prevention measure. The system will later offer even more protection by achieving biometric recognition without even requiring passengers to remove their masks.

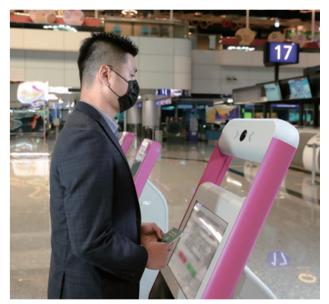
Prioritizing the Safeguarding of Scanned Facial and Personal Data

When it comes to safeguarding personal data, which is a hot-button topic in many nations, "Security is absolutely our top consideration," says Liu, who points out that the One ID system



▲ 長榮航空乘客於西雅圖國際機場以人臉辨識方式辦理登機手續。

EVA Air travelers use a face scan to complete boarding procedures at Seattle International Airport.



▲ 旅客可於自助報到櫃檯掃描人臉特徵,加入 One ID 試辦計畫。
Travelers scan their face at the self-service check-in to join the One ID pilot program

meets the IATA standards for protection of personal data and TTIA's policies and regulations governing the Internet, computer systems and so forth.

In light of the trials being carried out in various countries during the pandemic, it is clear that One ID can be effective in lowering interpersonal physical contact, raising efficiency and improving the experience of travelers. TIIA invites travelers to participate in the trial program and share in the excitement of "scanning your face" to travel the world.

D2 放眼國際 Looking Abroad D3 放眼國際 Looking Abroad



中華航空及長榮航空於 2021 年 9 月開始於部分航點試行國際航空運輸協會 (IATA) 推出的旅行通行證 (Travel Pass),透過健康數位驗證程序,將經由醫療院所認證的旅客疫苗接種或 Covid-19 PCR 檢測結果等健康證明及 航班資訊、目的地防疫相關規定等,整合在旅客的手機 App上,為旅客帶來更安心的飛航體驗。

In September of 2021, China Airlines and Eva Air began trial use of the Travel Pass of the International Air Transport Association (IATA) for flights from some destinations. Drawing from verified digital health records, each travel pass holds certification of a passenger's vaccination records and COVID-19 PCR diagnostic test results, as well as information about their flights and the relevant health regulations in effect at their flight destinations. Bringing all the information together in one mobile application, these passes offer travelers greater convenience and peace of mind.

新冠肺炎逐漸流感化之後,各國國境解封第一個挑戰就是跨境移動的安全問題,因此各大數位健康認證平臺紛紛崛起,而對於航空業最具意義的就是IATA Travel Pass。

數位健康認證助防疫

兩家國籍航空公司中,華航目前選擇美國洛杉磯、安大略、舊金山、紐約、溫哥華、德國法蘭克福、英國倫敦及新加坡等航點的返臺航班試辦,而長榮也在新加坡、吉隆坡、洛杉磯、舊金山、臺北等航點與各平臺合作試行,並挑選自巴黎飛返臺北的航線,導入IATA Travel Pass,希望加速報到作業的流暢度並減少人員接觸。

兩家公司也透過與不同的數位健康認證平臺 合作,瞭解各國政府及業界在健康資料數位化的 趨勢,共同協助防疫。 With COVID persisting around the world, like the flu, the first challenge for nations wanting to reopen their borders is figuring out how to move people across borders safely in this new era for public health. Consequently, numerous health-certification platforms have popped up. Among these, the one that holds the greatest importance for the aviation industry is IATA's Travel Pass.

Epidemic Prevention via Digital Health Certificates

China Airlines is currently using the IATA Travel Pass on flights back to Taiwan from destinations of Los Angeles, San Francisco, New York, Ontario, and Vancouver, as well as Frankfurt, London, and Singapore. Eva Air, meanwhile, is also cooperating with various platforms for pilot projects in destinations such as Singapore, Kuala Lumpur, Los Angeles, San Francisco, Taipei, etc and has selected flights returning to Taiwan from Paris for its trial. The hope is to speed and smoothen the checkin process and reduce contact between passengers and airline personnel.

Working together to fight the epidemic, the two airlines collaborated with several digital health-certification platforms to understand the trends of digitalization of health certificates.

營運新訊 Operations News

無線網路升級 WiFi-6 機場上網不卡卡

TTIA's Wireless Network Is Upgraded to WiFi-6, Eliminating Bottlenecks

在人手一機的時代,旅客對於無線網路速度要求愈來愈高,桃園國際機場率全國交通場站之先,全面更新無線網路系統設備至最新 WiFi-6 技術規格,超過 550 顆基地臺,佈建於航廈、登機門、停車場等公共區域,連網速度增加 8 倍,成為推動智慧機場的基礎建設之一。有了 WiFi-6 助攻,科技防疫更給力,旅客入境即可迅速在線上完成電子申報,清消人員也可以隨時監控洗手間使用情況,進行人力和備品調度。未來配合 5G 佈建,桃園機場將導入更多元的智慧型應用服務,旅客一機在手,暢行無阻。



In the smartphone era, travelers are placing ever-higher demands on Internet speeds. Ahead of other transportation hubs in Taiwan, Taiwan Taoyuan International Airport (TTIA) has completely overhauled its Wi-Fi system to meet WiFi-6 standards, installing more than 550 base stations spread throughout the terminals, gates, parking lots and other public areas of the airport. With Internet speeds eight times as fast, the overhauled system is providing a solid foundation for the smartification of the airport. Thanks to WiFi-6, anti-virus technologies are more robust, and arriving travelers are quickly able to complete their health declarations. The network allows disinfection staff to monitor the situation in restrooms in real time, deploying personnel and replenishing supplies as necessary. The future deployment of 5G will lead TTIA to employ a greater variety of smart services, allowing smartphones to make travel even easier.

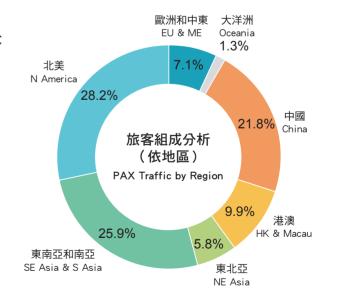
營運數據

桃園國際機場2021年Q1~Q3-貨運持續成長

Operational Statistics

Taiwan Taoyuan International Airport 2021 Q1~Q3 - Air Cargo Volume Continues to grow

	2021.1 – 2021.9	去年同期 Same Period Last Year	成長率 Growth Rate
客運量 Passenger Volume	680,794	7,162,627	-90.5%
貨運量 Air Cargo Volume	2,078,254	1,658,165	25.3%



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工程建設創新頁

南跑道及第三航廈進度邁大步

Construction Projects Reach New Milestones

South Runway Reopens and Work on Terminal 3 Pushes Ahead

在各界的期盼中,桃園國際機場第三航廈工程於今 (2021)年9月1日立下首支鋼柱,工程全面啟動; 隨後重新刨鋪的南跑道,也於9月15日重新開放起 降,在首架長榮班機降落後,桃園機場正式恢復雙跑 道作業。

The eagerly awaited first steel column of Taiwan Taoyuan International Airport (TTIA)'s Terminal 3 was erected on September I, 202I, after which construction of the terminal pushed ahead on all fronts. Then, on September 15, the newly resurfaced South Runway came back into use when an Eva Air flight made a landing, thus formally returning TTIA to dual-runway operations.

這兩年進出桃園國際機場,可以發現進出動線 及周邊景觀逐漸改變中,這也象徵著桃園機場以嶄 新面貌示人的日子又近了一步。

而近期最受矚目的工程就是第三航廈組立起首 根鋼柱,再加上已經決標並於10月1日啓動的機電 工程,整體站區工程已如火如荼展開,以穩健步伐, 朝向如質如期完工的目標,提供旅客全新的空運服 務體驗。

8月29日交通部王國材部長也在航政司何淑萍 司長、機場公司董事長林國顯及總經理但昭璧等陪 同下,於南跑道重新開放前親自檢視整建成果,並 感謝所有工作人員的努力與付出,順利完成整建工



▲ 8 日 20 日本通知王岡材部長(由)左南駒道田無線雲呼川関原 地面燈光,並慰勉機場空側作業人員。(右起為航政司何淑萍 司長及機場公司但昭璧總經理,左起為建中工程陳吉輝董事長

On the South Runway on August 29th, MOTC Minister Wang Kuo-tsai (center) used a walkie-talkie to request opening of the ground lights and to encourage the airside staff. (From the right are Department of Aviation Administration Director Ho Shu-ping and TIAC CEO Dan Zhaobi. From the left are Chien Chuna Construction Co., Ltd. Chairman Chen Ji-hui and TIAC Chairman Lin Kuo-shian.)

Visiting TTIA over the last two years, one would have discovered that the paths of entry and exit and the surrounding scenery were undergoing gradual transformations. These changes represented a step forward in realizing an entirely new look for the airport.

The erection of the first pillar is what attracted the most attention, but with mechanical and electrical engineering work starting on October 1, the entire Terminal 3 construction project is auickly moving ahead on-schedule and in a well-executed manner. The project's completion will offer travelers a completely new way to experience aviation services.

Accompanied by the Director of Department of Aviation Administration Ho Shu-ping, TIAC chairman Lin Kuo-shian and CEO Dan Zhao-bi, Minister of MOTC Wang Kuo-tsai inspected the South Runway's renovations before its reopening. He also expressed his aratitude to all those who worked hard to successfully complete the project.

臺灣門戶新意象

窺見第三航廈之美

New Images for Taiwan's Gateway to the World

A Glimpse at the Beauty of Terminal 3



桃園機場第三航廈工程如火如荼展開,各界也引頸期盼新國門的誕生,第 三航廈是桃園機場公司委由世界頂尖團隊羅傑斯史達克哈伯建築師事務所 設計,本期《飛 • 行》季刊帶領讀者提早窺見這座「精品航廈」之美。

With construction on Terminal 3 of Taiwan Taoyuan International Airport (TTIA) in full swing, many people eagerly anticipate the arrival of a new entrance to the nation's gateway. Taoyuan International Airport Corporation (TIAC) commissioned the renowned architectural practice Rogers Stirk Harbour + Partners (RSHP) to design the new airport terminal. In this issue of Taoyuan Airport Review, we invite readers to get a glimpse at the beauty of this premium edifice.

第三航廈的設計以打造「臺灣門戶新意象」 為目標,曲面波浪屋頂設計靈感來自於山稜線與雲 海,天花板有大量金屬圓管下垂裝飾,表達出「雲 的律動感」,而亞熱帶山區樹海及梯田景觀也注入 第三航廈入口綠牆,充分將臺灣特色化身為設計元 素,呈現在完美的建築作品中,讓旅客細細品味。

人本建築從現在延續到未來

桃園機場第三航廈將是國際旅客對臺灣的第 一印象,整體空間設計以人為本出發,採用玻璃圍 欄或大面積開窗創造透視感,未來旅客自高樓層入 境時,雲頂天花板與整個航廈空間直接映入眼簾, 藉由通透的視覺感,讓旅客與桃園機場、臺灣迅速 產生連結,傳遞悠然無壓力的機場體驗

The objective behind the design of Terminal 3 is to create a new image for Taiwan's gateway to the world. Inspiration for the wavy roof comes from mountain ridge lines and the sea of clouds. A large number of metal tubes hanging from the ceiling convey the clouds' rhythm and movement. Subtropical mountainous region forests and terraced field landscapes are incorporated into the green wall at the entrance of Terminal 3. The distinct Taiwan characteristics are integrated into the design of Terminal 3, allowing travelers to relish this building's beauty.

A Humanistic Building for Now and the Future

TTIA's Terminal 3 will be the first impression that international travelers make of Taiwan. The overall spatial design is humancentered. Glass barriers and expansive, open windows provide transparency. When travelers enter the airport from the upper floors, they are directly greeted by the site of the cloud top ceiling design and a full view of the terminal space. This transparency perception quickly engenders a connection between arriving travelers and both TTIA and Taiwan. The feeling generated is that of a leisure and relaxing airport experience.

牛物辨識好聰明

移民署第三代 e-Gate 讓通關更便利

Biometrics Is a Truly Smart Technology

NIA's 3rd-Gen e-Gates Bring Passengers Convenience

移民署於2020年1月在桃園機場完成22 座第三代自動查驗通關系統(以下稱第三代 e-Gate) 建置,採用更精準的生物特徵辨識技 術加強通關效能,並使用「人工智慧技術」學 習及偵測「兩人同行」狀況,在強化國境「風 險管理」之餘提供最高的通關服務品質。

準備出國的林先生經過安檢門之後,緩步走向第 三代 e-Gate 閘門前,接著拿出護照讓機器讀取,審核 成功後通過第一道閘門,人都還沒站定,螢幕已經顯 示出他的臉,第二道閘門並隨之開啓,讓他大呼:「真 的好方便。」

「生物辨識」功能進化 兼顧服務與安全

移民署國境事務大隊大隊長陳建成指出,第三代 e-Gate 可說是現今世界上最先進的通關系統之一,更 先進的「生物特徵辨識技術」搭配「人工智慧技術」, 除了大幅提升臉部辨識系統效能、新增「行進間辨識」 功能之外,還會配合生物特徵辨識系統,針對使用晶 片護照的外國旅客,將通關影像與指紋和晶片儲存的 旅客相片以及入境留存的指紋進行比對,讓想冒用別 人護照出境的歹徒無機可趁。

第三代 e-Gate 也比前兩代更聰明,不論是已註冊 的國人及持居留證旅客或未註冊的外籍旅客都適用, 系統會根據旅客所持用的護照自動切換通關流程,同 時内建 40 多種語言介面,方便各國旅客使用。目前 我國與美國、韓國、義大利和澳洲等國皆簽有備忘錄 (Memorandum of Understanding, MOU), 採取平等 互惠原則,開放彼此國民使用自動通關系統,未來也 會加速和日本等往來密切的國家洽談,對於紓解尖峰 起降時間的通關人流將有莫大幫助。



▲ 第三代 e-Gate 的行進間辨識功能大幅增加通關效率。 The 3rd-Gen e-Gate system's function of recognition in motion significantly increases immigration clearance efficiency.



▲ 旅客出境前需進行指紋比對。 Travelers' fingerprints are checked before departure.

有溫度的暖心服務 自動通關滿意度高

目前國人使用自動通關系統的滿意度高達 9 成 5以上,而桃園國際機場更多次獲得 Skytrax「最佳證 照查驗服務機場」前三名的肯定,陳建成認為這是國 境事務大隊全體隊員以暖心服務旅客的成果,也非常 感謝交通部、民航局、桃園機場公司及港務公司在建置 **過程中的協助與支持。**

近年來,桃園機場積極推動自助報到、自助行李託 運及自動通關等各項智慧化服務,在實踐智慧機場目標的 過程中,桃園機場也將持續引進更多創新科技接軌國際, 為旅客提供更加從容便捷的旅行體驗。



移民署國境事務大隊大隊長陳建成 Gibert Chen, Chief Commander of Border Affairs Corps of National Immigration Agency.

In January of 2020, National Immigration Agency of R.O.C. (Taiwan) installed 22 e-Gates as part of its third-generation automated border control system (3rd-Gen e-Gate). These 3rd-Gen e-Gates have not only raised clearance efficiency with more accurate biometric technologies, but they also possess the ability to engage in "artificial intelligence" and detect situations when two people have entered the mantrap of the e-Gate together. These e-Gates strengthen risk management at the national border while also offering the highest possible quality of services.

Going abroad, Mr. Lin first clears security and then strolls toward a 3rd-Gen e-Gate to scan his passport. Once his passport is verified, the first sliding door opens for him, and he enters the mantrap. But before he can even come to a stop, the screen ahead of him has already scanned and displayed his face, and the second door slides open immediately to let him pass, making him exclaim: "How convenient!!!"

Improved Biometric System Balances Service and Security

Gibert Chen, Chief Commander of Border Affairs Corps of National Immigration Agency, says that the 3rd-Gen e-Gate system could be described as one of the most advanced automated border control system currently in existence. With more advanced biometric technologies and artificial intelligence, the system greatly raises the efficiency of facial recognition and can capture people's faces in motion. Furthermore, it can also use biometric technologies to verify the identities of foreign e-Passport holders by comparing their facial and fingerprint scans with the photos stored on the chip of their passports and the fingerprint scans taken when they entered the country, thus preventing criminals from leaving Taiwan on someone else's passport.

The 3rd-Gen e-Gate system is smarter than the two previous generations. Registered nationals, holders of Alien Resident Certificates, and unregistered alien can all use the e-Gates. The system will automatically switch the clearance process based on the kind of passport the traveler is carrying. Furthermore,

its interface has more than 40 language options, making it easy for travelers from almost any country. Currently, Taiwan has signed memorandums of understanding with the United States, South Korea, Italy, and Australia to mutually open the nations' automated border control systems to each other under the principles of equality and reciprocity. Taiwan is prioritizing negotiations for similar agreements with Japan and other nations with which it has close relations. These agreements will help to ease passenger flows at peak times.

Heartwarming Service, High Satisfaction

Currently, over 95% of nationals are satisfied with the airport's automated border control system, and Taiwan Taoyuan International Airport (TIIA) has earned multiple top-three honors in Skytrax's rankings of the "Best Airport Immigration Service." Gibert Chen believes that these accolades are thanks to the warm service provided by the entire staff of the Border Affairs Corps, and he expresses deep gratitude for the assistance and support rendered by the Ministry of Transportation and Communications. the Civil Aviation Administration, Taiwan International Airport Corporation, and Taiwan International Ports Corporation during the process of installing the system.

In recent years, TTIA has actively promoted a number of smart services, including self-service check-in, self-bag-drop service, and e-gate. In order to build a smart airport, TTIA will continue to introduce more innovative technologies that meet global standards. Our goal is to provide travelers with an easier, more convenient travel experience.





◀ 清消機器人在出境大廳執行地面清潔、消毒作業。 Robots clean and disinfect the Departures Hall at the



入境旅客诵過抑菌艙時可利 用對人體無害的紫外線光消 毒兼量測額溫

Arrivina passenaers enter disinfection booths to have their surfaces sterilized with UV photocatalysis (harmless to temperatures are checked.

科技防疫

用智慧守護國門前線

Epidemic-Prevention Technologies

Protecting the Front Lines via Smartification

國際機場是防堵疫情境外移入的第一道防線,桃園機場透過多項科技防疫設備加強清消,與經濟部工業局合作 試辦「清潔暨消毒型機器人」計畫與人力作業互補,希望藉由智慧運用,達到最高的防疫效果。

With international airports having become the front lines of defense in national campaigns to protect citizens' health, Taoyuan International Airport Corporation (TIAC) has stepped up its disinfectant efforts, employing cleaning and disinfecting robots in conjunction with personnel to greatest effect. This project is carried out in cooperation with the Industrial Development Bureau of Taiwan's Ministry of Economic Affairs. TIAC hopes to use smart technology to increase the efficiency of its epidemic-prevention work.

「哇!好可愛唷!」桃園國際機場第二航廈 出境大廳,兩臺造型迥異、卻非常討喜的「清潔 暨消毒型機器人」引起大人小孩的驚喜。

在作業區域範圍內,定時執行大面積吸塵、 拖地工作,若是在水箱中加入清潔錠或消毒劑: 即有加強清潔消毒的效果,而且機器人具有自動 避開障礙物的功能,碰到旅客突然接近,也會即 時反應、暫停作業。桃園機場目前正蒐集試驗期 間數據,做為後續優化科技防疫參考,並探索在 不同領域導入機器人,實現機場智慧化的發展趨

防疫生力軍 紫外線抑菌設備入列

除此之外,考量在疫情嚴峻的情況下,強化 殺菌措施能讓旅客更加安心。在第二航廈入境證 照查驗前方裝設的兩座抑菌艙,是旅客保護自己、 保護他人的利器。目前國際疫情依然緊繃,邊境 防疫也不能鬆懈,透過科技產品加持,讓桃園機 場的防疫工作事半功倍,提升防疫成效

"Woah! How cute!" In the Departures Hall of TTIA's Terminal 2, there are two weird but appealing "cleaning and disinfecting robots." They can't help but draw people's notice and spur their curiosity.

At scheduled times, these disinfecting robots vacuum and mop large expanses within their designated work areas. By adding cleaning tablets or disinfectant to their water tanks, the efficiency of the disinfecting process has increased. What is more, the robots automatically avoid obstacles and pause immediately when travelers suddenly approach. During this trial period of operations, TTIA is collecting data, which will help optimize how epidemic prevention technology is used and serve as a reference when employing robots in other capacities as the airport continues to pursue smartification.

Anti-Epidemic Reinforcements: UV Sterilization Modules

In light of the severity of the pandemic, the strengthening of disinfectant measures puts travelers more at ease. Two disinfection booths for arriving travelers in Terminal 2 provide a means for travelers to protect both themselves and others. Considering the severity of the pandemic, epidemic-prevention controls at national borders cannot currently be loosened. With the support of new technology, TIA's epidemic-prevention work will achieve even better results and increase efficiency.



桃機防疫英雄光榮入列

It's Great to Have You

Honoring the TTIA's Heroes of **Epidemic Prevention**

桃園機場公司,由董事長林 國顯代表接受

President Tsai Ing-wen presents a medal for disease prevention shian accepting the award on behalf of the corporation.

▲ 交通部防疫英雄專車由桃園機場公司 總經理但昭璧擔任領隊,與防疫車隊 主委黃良益率領司機代表,共同參與 國慶遊行。(照片由總統府提供) TIAC CEO Dan Zhao-bi leads the MOTO "epidemic prevention heroes" vehicle to join National Day parade. (Photo provided by the Presidential Office.)

桃園國際機場嚴守邊境、防止新冠肺炎入侵國土,為國人健康把關已 近兩年,成績有目共睹,不僅獲總統頒發「防疫獎章」,今年更受邀 參與雙十國慶遊行,與國人共享光榮時刻。

Taiwan Taoyuan International Airport (TTIA) strictly monitors Taiwan's borders to prevent the incursion of coronavirus . During the past two years, as the airport carried out this duty to protect people's health, its excellent performance was apparent to all people. The president awarded Taoyuan International Airport Corporation (TIAC) a medal for disease prevention, and this year airport representatives were even invited to join the Double Ten National Day parade to share this glorious moment.

國慶日上午11時38分,由6輛黃色的 防疫計程車打頭陣,後面跟著防疫物資配送 車、路面清掃車、大型裝載車及由桃園機場公 司總經理但昭璧領隊的交通部「防疫英雄」專 車,依序通過總統府前方,接受總統蔡英文及 海内外各界貴賓致敬,表彰這群已兢兢業業努 力 18 個月以上的防疫英雄的肯定。

桃園機場公司自疫情發生以來,即全力配 合中央疫情指揮中心執行各項防疫措施,包括 協調專案包機返臺任務、進口疫苗、完善旅客 檢疫、環境清消措施、增設篩檢站、組成防疫 車隊護送旅客自機場到達檢疫地點,成功防堵 疫情入侵,去年9月27日獲得總統蔡英文親 自頒發「防疫獎章」。機場公司董事長林國顯 強調,將和同仁持續以最嚴謹的態度,做好國 門防疫工作,全力守護國人健康

At 11:38 am on National Day, a epidemic prevention fleet of six taxis led a procession that included vehicles for delivering disease prevention supplies, street sweeper vehicles, large loading vehicles, and a Ministry of Transportation and Communications "epidemic prevention heroes" vehicle, which was led by the TIAC CEO Dan Zhao-bi. The procession passed by the Presidential Office Building, where President Tsai Ing-wen and dignitaries from both Taiwan and abroad paid tribute to these heroes.

Since the start of the pandemic, TIAC has been fully committed to carrying out disease prevention measures, as directed by the Centers for Disease Control. These include arranging chartered flights for repatriating citizens, conducting comprehensive quarantine measures on passengers, importing vacciontion, keeping the airport environment clean, adding more sampling and inspection stations, and assembling pandemic prevention fleets for transporting travelers from the airport to guarantine sites. These efforts successfully helped Taiwan to keep the pandemic at bay. In recognition, on September 27th of last year President Tsai Ing-wen personally awarded TIAC a medal for disease prevention. The chairman of TIAC, Lin Kuo-shian, says that the airport will continue to conduct rigorous disease prevention at the nation's gateway in order to fully protect people's health

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Breath Taiwan

A Unique Fragrance to Remember Taiwan

想家的時候,只要有一絲絲記憶中家鄉的味道,就能撫慰思鄉的情緒,而 氣味更是旅人與異國情感連結的重要元素,因此桃園機場公司特別尋找能 夠代表臺灣的獨特香氣,設計一款專屬「國門香」,讓大家能夠從氣味記 憶臺灣,也傳達出桃園機場從五感體驗出發,觸動旅人心的暖心服務。

When you are homesick, anything that reminds you of home is comforting. And scents are especially important elements in how travelers connect to exotic foreign locales. Consequently, Taoyuan International Airport Corporation (TIAC) intentionally searched for unique aromas to represent Taiwan when creating "Breath Taiwan." The fragrance offers everyone a chance to remember Taiwan, and it also conveys, via sensory experience, how Taiwan Taoyuan International Airport (TTIA) touches travelers through the warm services it provides.

閉上眼睛深呼吸,問問自己還記得臺灣山林的氣 味嗎?

輕輕搧了搧手中的香氛卡、深深嗅吸一抹國門香的芬芳,那是由臺灣檜木、柏針葉、雪松木打造出的一方純淨療癒空間,是心之所向的世外桃源:一座小廟,點起一柱線香,裊裊輕煙,沉穩、溫暖的氣息承載著誠心的祝禱,成為一股安定的力量:再來一杯清茶,茶香四溢、層次分明,香氣中透著三五好友及家人相聚的暖心記憶。

為了讓所有讀者都能感受到同樣的悸動,在這一期的《飛·行》季刊中,桃園機場也特別附上「國門香」香氛卡,希望用這一抹獨特的芬芳牽動每個人心中那份臺灣的獨家記憶,體驗桃園機場帶給旅客的感動與美好。

Close your eyes and breathe deeply, and then ask yourself if you can still remember the scent of Taiwan's forests?

Lightly fan the fragrance card and deeply breathe in the fragrance of "Breath Taiwan". It conjures up a pure healing space created from Formosan hinoki, cypress needles, and cedar wood - a true paradise of the heart's desires. It also evokes a temple, where devotees light sticks of incense to send smoke spiraling upward, as calm, warm breaths carry with them sincere prayers for peace. And here is a cup of green tea, the clearly layered aromas overflowing, calling forth warm memories of gathering with family members and good friends.

So that all readers may be similarly touched, TIAC has specially included a "Breath Taiwan" fragrance card in this issue of *Taoyuan Airport Review*, hoping that its special scents will spur unique memories of Taiwan in all, providing access to the moving and beautiful experiences that TIIA offers travelers.

人物特寫 Feature Close-Ups

用同理心創造不平凡 移民署王晏翎

From Empathy Comes the Extraordinary \sim Wang Yan-ling

「所有的不平凡,都是由平凡一點一滴累積而成!」

在臺灣進入疫情三級警戒之前,一位來自於歐洲、單獨入境的女性旅客,對移民官王晏翎出示護照的要求無動於衷,原來對方是聽障人士,主要依靠讀唇語和外界溝通:瞭解情況後,王晏翎立即拿下口罩、透過隔板以唇型與對方溝通,讓這位旅客非常感動。王晏翎認為執勤時如果能夠多一點同理心,便能看見旅客的需求,進而避免很多誤會,讓證照查驗的工作增添人情味。

"The extraordinary is built bit by bit from the ordinary!"

Before the nationwide COVID-19 alert was raised to Level 3, a solo woman traveler from Europe, appeared indifferent to immigration officer Wang Yan-ling's requests to see her passport. It turned out that the woman was deaf and reliant on lip-reading to communicate with the outside world. Understanding the situation, Wang immediately took off her mask and communicated with the woman via the movement of her lips behind a transparent panel. It moved the woman deeply. Wang believes that by empathizing more while on duty, one will be better able to see travelers' needs and avoid misunderstandings, thus giving a more human touch to the inspection of travel documents.



兼顧飛安與效率的機坪神調度 桃園機場公司林玉茹

Master of Flight Safety and Efficient Apron Scheduling ~ Lin Yu-ju



「同理心出發,公平解決問題!」

獲選 110 年交通部模範公務員、人稱「教官」的林玉茹,是桃園機場航務處值班主任,主要負責空側作業秩序與飛航安全。疫情期間因應上百架航機停駐需求,以專業經驗與同理心協調機位調度,兼顧飛航安全與維護機場正常營運,擴大機場停駐容量。高壓工作培養了林玉茹快、狠、準的俐落風格,凡事說重點的習慣及公平處世的原則,在處理地勤、航空公司等業者問題時,格外有說服力,也能圓滿完成各項任務,展現機場公司整體服務效能,為提升航空運輸服務貢獻心力。

"Solving problems fairly by starting with empathy!"

Lin Yu-ju, nicknamed "the instructor," was awarded the prize for the Ministry of Transportation and Communications' 2021 Model Public Servant. A shift supervisor in the Airside Management Department, she is chiefly responsible for airside operational procedures and safety. With more than 100 airplanes parked during the COVID pandemic, she was able to leverage her experience to empathetically coordinate apron scheduling, thereby expanding parking capacity for airplanes at the airport while continuing to ensure flight safety and to maintain regular airport operations. This high-pressure work has helped to hone Lin's speed, precision, and decisiveness as well as her ability to get straight to the point. Aiding her in completing her duties, these attributes have helped to improve airport services, thus bearing witness to TIAC's efficiency.



12 特別報導 Special Report

飛行,有意思_{Flying Is Fun}

斑駁的行裝,

刻劃著走遍世界的印記,

乘載了年少至今的異國想像;

下一次,

我們約好一起出發,

體驗飛行的美好,

穿越雲端的想像。

Luggage spotted and discolored

Carries the marks of its global journeys

Bearing witness to a life of imagining about exotic destinations

Next time

Let's make a date to take off on a journey together

To experience the beauty of flying

As our imaginings are conveyed beyond the clouds' end

