

護燈保航 Safeguarding Hilltop Obstacle Lights for Flight Safety



新安裝的LED航空障礙燈更具能源效益、更可靠、更方便維修。

The newly installed LED obstacle light is more energy efficient, more reliable and convenient to maintain.

民航處在赤鱗角香港國際機場附近的高山上，設置了八座航空障礙燈基站，提醒機師在飛經附近山嶺時，無論是降落前還是起飛後，都須格外小心，確保航班安全。

受民航處委託，機電工程署為所有航空障礙燈進行定期檢查和緊急維修，確保運作正常。山嶺上沒有車路，不管晴天、雨天，甚至在颱風和暴雨等惡劣天氣下，同事們都必須手攜沉重的工具和設備，沿着崎嶇山徑登上山頂進行維修或更換器材。

去年12月，我們成功地進行了一項試點項目，為一盞航空障礙燈安裝了GSM制式的自動撥號器，並以較輕便和節能的LED燈取代沉重的航空障礙燈。即時的遠程監控和更可靠的設備裝置，為我們每年節省了40個現場檢測工時和2,000多度耗電量，同時也改善了同事們的職安健。因此，我們會於2014年內將這項改善工程擴展到其他航空障礙燈基站，全面採用更可靠、更具能源效益的LED航空障礙燈。

The Civil Aviation Department (CAD) deploys eight obstacle light stations on the hilltop areas near the Hong Kong International Airport at Chek Lap Kok. They alert pilots to take extra care in navigating the nearby mountains, ensuring flight safety for all passengers when they are approaching and departing the Airport.

Entrusted by CAD, EMSD conducts regular inspections and emergency repairs for all hilltop obstacle lights to ensure their proper functioning. Without vehicular access, our colleagues have to manually carry heavy tools and equipment along the rugged mountain trail to the hilltop for repairs or replacement, whether it is sunny or rainy or under adverse weather conditions like typhoon and rainstorm.

Last December, we took initiative to install a trial GSM auto dialer and replace the heavy obstacle light on one of the obstacle light stations with a light-weight, more energy efficient LED light. This pilot project successfully achieved timely remote monitoring of the obstacle light, and enhanced equipment reliability as well as improved working conditions and safety for staff.

With the new LED light, we save around 40 man-hours for on-site inspection and over 2,000KWh power consumption per year per station. With much improved reliability and energy efficiency after installation of new LED obstacle lights, similar modification is being extended to other obstacle light stations in 2014.



每次維修航空障礙燈，曾集文先生都須徒步最少3小時15分鐘。他的工作有助加強航班安全。(右邊為舊式氖光航空障礙燈)

Mr. Tsang Chap-man walks at least three and a quarter hours every trip to fix an obstacle light. His work helps enhance flight safety. (The light on the right: neon obstacle light)

攀山越嶺 責無旁貸

助理電氣督察/民航/維修 曾集文先生

「氖光航空障礙燈重達30至40公斤，要將它安裝在山頂並不是一件容易的事！」

「很多時候，因為沒有車路到達山頂，而附近又沒有可供直升機升降的停機坪，我們必須手攜沉重的工具和設備，徒步兩小時登山進行維修或更換器材，再用一個半小時下山。」

「為安全起見，每次登山進行維修工作，我們都會組成至少兩人的小組，帶齊登山設備和必需品，行山手杖和行山鞋必不可少。新的LED航空障礙燈僅重約12公斤，大幅度減輕我們的負擔。」

「為了確保航班安全，即使攀山越嶺我們也責無旁貸。」

The Walk Must Go On

Mr. Tsang Chap-man, Assistant Electrical Inspector/ Civil Aviation/ Maintenance

“Fixing the obstacle lights on the hilltop is not an easy task, especially when each neon obstacle light weighs as much as 30 to 40 kg.

“Very often, there is no vehicular road access and it is hard to fly a helicopter to the hilltop where there is no proper helicopter pad. We must carry the heavy tools and equipment for repairs and replacement, and walk for two hours to the hilltop, and another one and a half hours downhill.

“To play safe, we always go in teams of at least two persons for every trip up the mountain to carry out maintenance work. Of course, we are well equipped with hiking equipment and necessities like walking sticks and hiking shoes. With the new LED lights weighing just around 12kg, our burden has been much reduced.

“We know the walk must go on to ensure flight safety!”



儘管山路崎嶇，我們也責無旁貸。

The walk must go on, in spite of the rugged mountain trail.

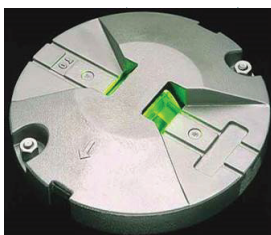
猜「燈」謎！Bring to Light!

以下各款照明燈都可在香港國際機場找到，你知道它們的用途嗎？（答案在網頁找）

The following lights are used in The Hong Kong International Airport. Do you know what they are for? (Please find answers in the web site.)



A



B



C



D



E