業餘無線電 Q & A

什麼是業餘無線電通訊 ?

業餘無線電通訊是指不是為了金錢利益，純綷為了個人對無線電通訊技術有興趣而進行的研究，自我訓練。而業餘電台的設立 是需要符合當地法規所規定的條文。

業餘無線電是項跨學科的技術形式嗜好，涉及電子、電腦、溝通、通訊、工程、天文、地理、氣象、語文及法律等範疇。有人稱業餘無線電為嗜好之皇。也有人稱業餘無線電愛好者為平民外交家。

業餘無線電愛好者會以服務社會為己任。除日常無線電通訊，當萬一遇到災難，災區常規通訊失效，業餘無線可以第一時間協助傳達災難應急資訊，作出有成效的通訊支援。概因業餘無線電台是熟識通訊的個體，自家擁有通訊器材及能作靈巧運作。業餘無線電應急通訊 (ARES) 着可有重要角色。詳情請瀏覽 ITU -- 國際電訊聯盟及 IARU -- 國際業餘無線電聯盟有關緊急通訊的網頁。

在香港進行業餘無線電通訊有什麼手續?

香港負責管理業餘無線電通訊事務的政府部門是通訊事務管理局 OFCA。

如果你想成為持牌業餘無線電操作人員，你需要參加一個筆試。考試的範圍包括電訊法例，基本的無線電及電子知識。 考試由 OFCA 舉辦，關注/有意考試,可於留意 OFCA 最新之相關詳情。

當你通過上述考試後，你便可向通訊事務管理局申請業餘電台牌照、並獲分配一個以 VR2(香港專用)為字首的呼號給你。 這個以 VR2 為字首的呼號，再加上其字尾部份；便組成一個世上獨一無二的業餘無線電台呼號

撰文：VR2GY

再生能源系統

再生能源系統體積小，易攜帶，重量輕,且是經由多種自然界資源途徑而獲得的能源：包括太陽能電池，手搖發電，風力發電、(水力發電) 等等,這些再生能源都能配合推廣環保,利用自然界資源的實踐、認知，更進一步的是可配合超級電容器及鋰電池充電，來儲存事先準備好的電能，就可成為一個有實用的價值極高的緊急後備電源。例如當我們由於種種原因失去城市供電或身處野外而電池又耗盡用量時，怎樣維持起碼的電能供應，如用於照明、小型電腦、手電等的充電等。

撰文：VR2VJU

QSL 咭簡介

在業餘無線電慣常用術語中，"QSL"就是代表「請問收到否?」或「確認已經收到了。」的意思，即用作發問時就是問題，用作回覆時便是答案。

"QSL 咭"，那就是一種證明咭，用來彼此交換，以證明曾經透過無線電波相互接觸，通常透過郵遞交換。(QSL 咭亦有應用於直接見面時留念)。

QSL 咭對許多業餘無線電愛好者佔非常重要的位置，尤其是對有興趣申請通訊獎狀及有蒐集QSL 咭習慣的朋友。

QSL 咭，也可以成為你業餘無線電生涯中非常珍惜的各種里程碑。

一張有效的 QSL 咭，記錄資料項目包括有：
1) 通訊日期與時間(國際標準時間 UTC 記載)。即以 24 小時方式表示本地時間再減 8，
     e.g 香港時間 1300 = UTC 0500
2) 通訊雙方、或收聽者自己所收聽到通訊雙方的電台呼號。
3) 通訊或聆聽使用的頻率(e.g: xxMHz)。
4) 訊號報告(e.g: RSxx,RSTxxx,...)。
5) 通訊模式(e.g: FM,SSB,CW,...)。

撰文：VR2UGP

All about Amateur Radio Communication

What is Amateur Radio Communication?

Amateur Radio Communication is not for money, but for individuals who are interested on Radio Communication Technologies. Following by the local law and ordinances, they can do research or self-learning by hosting an Amateur Radio Station.

Amateur Radio Communication is an interest which covers various aspects, including electronics, computer, communication, engineering, astronomy, geography, meteorology, language and law, etc. Some people called Amateur Radio Communication as "King of Interests", while some others called it "Civil Diplomatist"

Amateur radio lovers try to serve the society. In case of any disasters, the communication would be suspended. Amateur Radio Communication could convey emergency message at the first instant and make effective communication support. Amateur Radio Station is well experienced in communication, they own their communication hardware and operate very well. *Amateur Radio* Emergency Service (ARES) plays an important role in doing so. For more information, please refer to the websites of The International Telecommunication Union (*ITU*) and The International Amateur Radio Union (*IARU*).

How to operate Amateur Radio Communication in Hong Kong?

Office of the Communications Authority (OFCA) is the governmental authority who manages the Amateur Radio Communication activities in Hong Kong.

If you are interested in holding a license in operating Amateur Radio Communication, you have to take an exam, with content including laws on radio communication, knowledge on electronics, etc. The exam is organized by OFCA, for further information about the exam please refer to the OFCA website.

Once you have passed the exam, you may apply for the Amateur Station License, and would be allocated would a call sign starting with "VR2" (exclusively used in Hong Kong). Starting with "VR2" and followed a latter part of your own choices, you may have a unique Amateur Station Call Sign.

By VR2GY

Renewable energy system

The system is of small volume, handy, light-weight and collecting energy via various sources including sunlight, kinetic, wind and water energy, etc. All these kinds of renewable energy are environmental friendly. It could be used to recharge super capacitors or lithium batteries so that energy could be stored as an emergency source of energy.

By VR2VJU

The QSL Card

In common languages of Amateur Radio Communication, "QSL" means *"Do you confirm receipt of my transmission?"* or *"I confirm receipt of your transmission"*, in cases of asking or answering respectively.

QSL Card is a card for proof, as an exchange for confirmation with an Amateur Radio Communication. This would be done by mailing the cards to each other. (Sometimes QSL card would be exchanged during direct meetups.)

QSL Cards place an important role for Amateur radio lovers, particularly for apply communication certificates and QSL Card collectors.

QSL Card also serves as the milestones of your life in Amateur Radio Communication.

A valid QSL card contains with the below information:
1) Date and Time of Communication - in terms of Coordinated Universal Time (*UTC*).   It would be displayed in 24-hour clock minus 8 for Hong Kong e.g. Hong Kong Time 1300 = UTC 0500.
2) Call Signs from the two sides or others who were listening to the conversation.
3) The frequency used during calling or listening, e.g. xxMHz.
4) Report on the signal, e.g. RSxx, RSTxxx, …
5) Way of Communication e.g. FM, SSB, CW, …

By VR2UGP