



We welcome your views...

We are pleased to bring you another edition of our Newsletter. If you missed any earlier editions, these are available on our website (www.leapp.aero - "Online Resources".)

We are grateful for all of the feedback we receive from the many industry professionals on our mailing list. Any ideas as to how we might improve this Newsletter are always welcome.

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Understanding ICAO's Aerodrome Reference Codes

When a consultant suggested to us that a runway, planned at 1750m in length and intended for short-haul use by B737-400 aircraft, should be classed as a Code 3C runway because of its length, we realized there was a misunderstanding of the use of the ICAO Aerodrome Reference Code system. The real point, of course, is that the critical aircraft has a reference field length (RFL) in Code 4, based on the Aerodrome Reference Code system, and the standards to be applied would be those of Code 4, not Code 3.

Since then, we have noticed that misunderstanding the ICAO Aerodrome Reference Code system is rather more widespread, and some Civil Aviation Authorities even suffer from this. The trap many fall into is to regard the Aerodrome Reference Code system as a way of "classifying" runways based on the actual length of a runway, and then to apply the Annex 14 standards that *de facto* reflect the runway length, rather than the RFL of the critical aircraft. One European CAA has even inserted the Annex 14 Aerodrome Reference Code table into its AIP, but has changed the "Element 1" column of the table to read "Runway Length", rather than "Aeroplane Reference Field Length" as stated in the Annex - clearly misunderstanding ICAO's intent to link Aerodrome Code to the Aeroplane Reference Field length, not to the length of the runway.

ICAO goes to great lengths in Annex 14 to impress that... "The determination of the aeroplane reference field length is solely for the selection of a code

Ongoing Activity

Iran

- Qeshm International Airport
Long-range Airport Master Plan Development

Ireland

- Donegal Airport
Safety Management System
- Sligo Airport
Runway Re-configuration and Optimisation
- Waterford Airport
Airfield Improvements

Madagascar

- Civil Aviation Authority of Madagascar
Civil Aviation Management Information System

New Zealand

- Christchurch International Airport
Review of Bird Hazard Study

number and is not intended to influence the actual runway length provided". In other words, the Aerodrome Reference Code is determined by the RFL for the critical aircraft to be used for operations. Since RFL is related to a specific atmospheric, environmental, and operational condition, the actual runway length required by the critical aircraft under different conditions may be more, or less, than the aeroplane RFL - but this operational need does not change the Aerodrome Reference Code to be applied for planning and design.



Pangkor Island Airport, Malaysia

Confusion seems to arise particularly for the larger Code 2 passenger aircraft, whose RFL is close to the upper limit of Code 2, and for which an actual runway rather longer than the RFL will certainly be needed under hot summer conditions. Such a runway is still a Code 2 runway, however.

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Qeshm Island Airport Master Plan

Lying only 2km off the coast of Iran in the Strait of Hormuz, Qeshm Island is being developed as a major free trade zone for industry, commerce, tourism and duty-free shopping by the Qeshm Free Authority (QFA). A new airport opened in 1997, providing a 4200m runway and small terminal building. Industrial development has already commenced on the island, while the airport is to be expanded to support the island's economic growth, and to attract commercial and industrial activities to the site. Included among targeted land uses for the airport are an air cargo hub, bonded warehousing, aircraft maintenance, airport business park and financial centre.



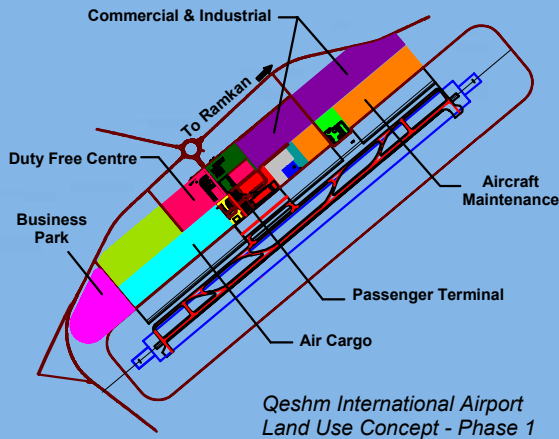
Qeshm Island in the Strait of Hormuz

LEAPP, together with New Zealand's Airways International Limited, prepared the Airport Master Plan for Qeshm International Airport under a commission from the Qeshm Investment Development Organisation (QIDO). With a potential site area of 1900ha., which can also accommodate a second runway of 4260m, the Master Plan proposes a wide range of commercial development.

Initial stage development, based on ICAO Code "F" standards, will add a Category III ILS and lighting to the existing 4200m runway, along with a parallel taxiway, new passenger terminal, and expansion of the apron to enable development of air cargo and aircraft maintenance facilities.

Air Services already link Qeshm to Tehran, and to other domestic points, as well as to the nearby airports of Dubai, Ras Al Khaimah, and Sharjah.

With the benefit of the planned bridge to the mainland, the aim is to develop Qeshm Airport as a primary airport for Southern Iran, ultimately to replace the Bandar Abbas Airport, and to attract tourist, shopping and cargo traffic.



The picturesque town of Laft, one of Qeshm's tourist attractions



Auditing Civil Aviation in Kosovo

Ever since civil war broke up the former Federal Republic of Yugoslavia (FRY), civilian administration of Kosovo has been carried out by the UN through its in Kosovo (UNMIK). As part of this responsibility, UNMIK commissioned financial, operational and forensic audits of civil aviation in Kosovo and of the Pristina Airport. Working in partnership with financial auditors De Chazel Du Mee, LEAPP carried out the review of civil aviation administration, regulation and operation, and undertook an operational audit of the Pristina Airport.

space, and a procedural ATC environment in the Kosovo airspace, have all placed pressure on the infrastructure to support a growing demand for air travel. Lack of a civil aviation regulator, a confused legal situation for ownership of the airport assets, and funding of civil aviation projects by different agencies with different priorities, have established a need for a strategic plan to direct and coordinate future civil aviation investment. Emerging from the audit as a critical issues for the future were the need for a regulator, along with rationalisation of management and administration of civil aviation, and a need to prioritised the capital programme for Pristina Airport.

A rapid growth in air services to Europe has resulted in some 1 million annual passengers using a small terminal building, while insufficient apron

Management Information System for Madagascar CAA

The need to submit to audit and ensure regulatory compliance has caused the Civil Aviation Authority of Madagascar (L'Aviation Civile de Madagascar - ACM) to begin implementation of an integrated Management Information System, to encompass all of its regulatory and operational activities.

Madagascar, the world's 4th largest island, relies on an extensive civil aviation infrastructure and 55 airports.



Under World Bank funding, ACM will computerize its record-keeping and reporting systems to cover the documentation and tracking requirements of its responsibilities under the ICAO Annexes. Priority is being placed on computerising the Authority's activities under Annexes 1, 6, 8, 14 and 17, although ACM's Human Resources, Training, Accounting, Document Control, Statistics and Aeronautical Information Publication are also part of the system. Assisting its role as the responsible authority for the government's 55 airports, the MIS is also incorporating airport management and maintenance reporting, as well as procurement and control of supplies and materials for aerodrome operations.

mation system will use the latest intranet and internet technology to enable staff access to the MIS, and for public access to an ACM website. For the aviation community, the MIS will be providing access through the ACM website for consultation of Air Regulations, NOTAM's and the AIP, and for filing of overflight and airspace use applications.

Based on a concept for civil aviation information management, developed by LEAPP for small civil aviation authorities, the ACM's management infor-

What Is Wrong with this Picture?



.....apart from being underexposed, of course!

Safety Issue

Taken from inside an apron-level departure lounge, this shows the access door to the apron propped open, and unattended. At the time, a passenger, anxious for a smoke in the cool morning air, had actually wandered out unchallenged onto the apron to light up! This door was left open for a long time before boarding commenced.

The aircraft on the apron feeds into a regional hub in the Americas, from which direct airside access can be gained to flights departing for the US. Aside from that implication, free access to the apron by passengers waiting to board flights is clearly a serious security violation, and contrary to Annex 17, Section 4.0.