

Amid negotiations for the reunification of Cyprus, risks of pilot confusion persist in the Nicosia FIR.

UNCIVIL AVIATION

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Members of airline pilot unions worldwide have received the third safety bulletin since 2001 spotlighting the protracted political dispute that has created uncoordinated and potentially conflicting air traffic services (ATS) in part of the Nicosia Flight Information Region (FIR).¹ The airspace of concern extends northward to Turkey from the Turkish Cypriot-governed northern part of Cyprus, an island nation in the eastern Mediterranean Sea (Figure 1).

The bulletin from the International Federation of Air Line Pilots' Associations (IFALPA) reminds flight crews about unique operational risks in this part of the Nicosia FIR, especially the potential for confusion about which ATS area control center (ACC) has authority. IFALPA urged pilots to be aware of consensus recommendations from

global aviation organizations on how to handle communications. The recommendations address the fundamental issue of controllers from the Greek Cypriot ACC and the Turkish Cypriot ACC providing instructions to aircraft crews although these ACCs do not communicate directly with each other.

The International Civil Aviation Organization (ICAO) recognizes only the Republic of Cyprus, the southern part of the island governed by Greek Cypriots, and its Nicosia ACC as responsible for ATS in the Nicosia FIR. The Turkish Cypriot community, however, since 1977 also has asserted authority over its air transportation system and ATS, which primarily has evolved into flights on ATS Route A-28 between Ercan International Airport and Turkey.

This airport is located east of Nicosia in the part of the island that Turkish

Cypriots and Turkey call the Turkish Republic of Northern Cyprus (TRNC), a political entity unrecognized by the United Nations (U.N.) that was established in 1983 after the 1974 occupation of about 36 percent of the island by Turkish military forces. The U.N. Peacekeeping Force in Cyprus controls a military buffer zone, called the Green Line, between the two parts of the island, and the U.N. Good Offices Mission to Cyprus assists in negotiations now under way for reunification of the island.

A June safety briefing to IFALPA's Air Traffic Services Committee by a representative of the Nicosia ACC prompted IFALPA's bulletin. The representative discussed 2006–2009 ATS events in the area of concern and their significance (Table 1, p. 42), said Carlos Limon, president of IFALPA and captain for Mexicana Airlines. The events

were categorized as pilot deviations from Nicosia ACC controller clearances, unauthorized penetrations of Nicosia FIR airspace — meaning entry of an aircraft without traffic coordination at least 10 minutes in advance — and deviations from the published air traffic management procedures, he said.

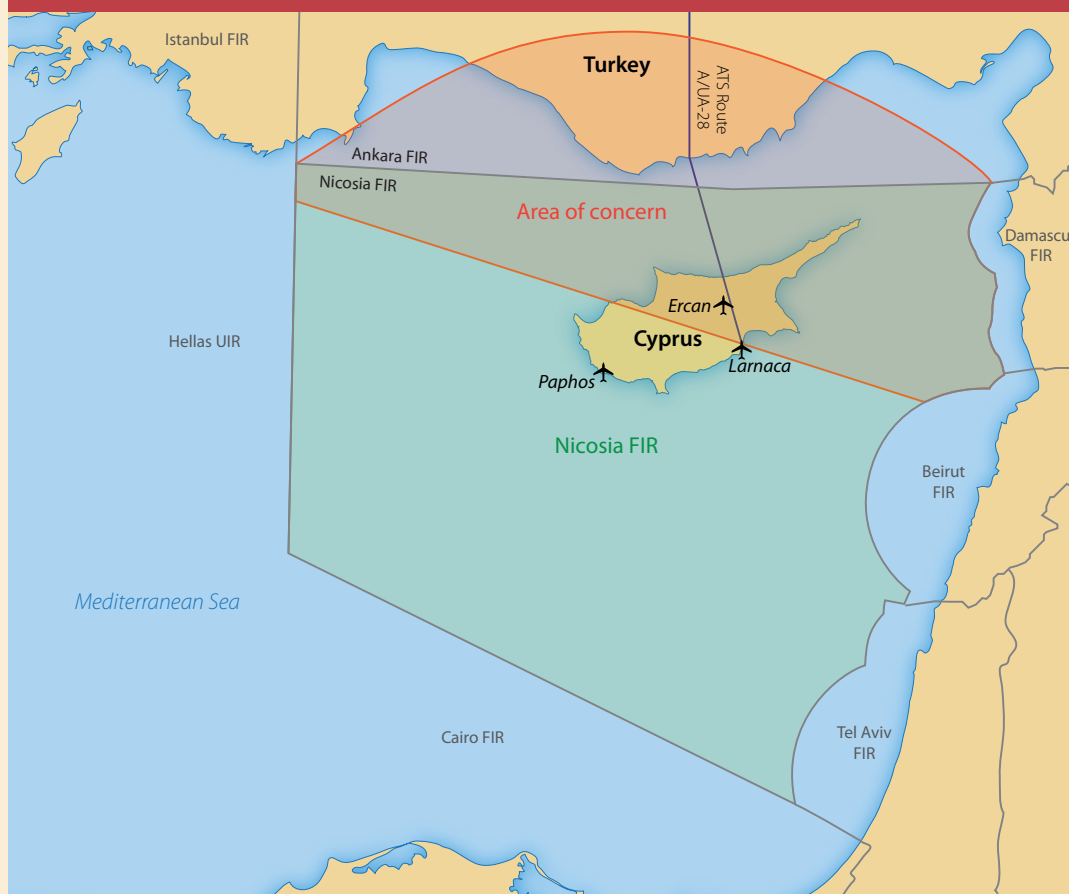
“The issues between the northern part of the Nicosia FIR and parts of the Ankara FIR have been known to us for a long time,” Limon said. “IFALPA classifies that particular part of the airspace as ‘critically deficient’ in particular because of the problems

with Ercan, which is not recognized by ICAO. The ATS communication issues — such as who designates levels, etc. — can become quite complicated, particularly to flight crews that have not operated before in that airspace. Sometimes in the past, IFALPA had received safety reports, but to be fair, IFALPA has not directly received reports concerning this particular airspace for a couple of years.”

The intent of the bulletin was to highlight that the problem continues, and to remind flight crews of IFALPA’s recommendations, he said. They are a brief subset of comprehensive measures endorsed by the United Nations and



ATC Deviation Issues in Nicosia FIR



ATS = air traffic service; FIR = flight information region; UIR = upper information region

Note: The Ercan International Airport, Ercan Terminal Control Area and Ercan Advisory Area are not officially recognized by the Republic of Cyprus, which has responsibility for all Nicosia FIR airspace by decision of the International Civil Aviation Organization.

Source: Department of Civil Aviation of the Republic of Cyprus and Flight Safety Foundation

Figure 1

published as Jeppesen Briefing Bulletin FRA 99-A, “Nicosia FIR/UIR IATA Communications/Control Procedures (extract from *IATA Information Bulletin*).”

Finding an ATS solution acceptable to all concerned has been “incredibly difficult” despite technical initiatives and negotiations facilitated by ICAO and European organizations, Limon added. “The problem appears to be political, and it needs to be resolved because clearly there are flight safety issues.

Northern Cyprus as an occupied territory — not as a sovereign state — so Ercan TMA and Ercan Advisory Airspace do not exist officially. Nevertheless, aircraft crews are being switched from Ankara ACC to Ercan ACC on a routine basis. That is causing quite a bit of confusion, as indicated by the reports we have seen. This is one of the last of a handful of disputed pieces of airspace left in the world, but Nicosia FIR sees quite a bit of traffic out of Beirut and Damascus, and major Middle East air carriers have to transit this airspace.”

The existence of contested airspace itself creates problems incompatible with regional harmonization of ATS risk reduction efforts. Eurocontrol’s Single European Sky ATM Research (SESAR) project and the advent of ATS safety management systems hopefully will encourage resolution, Voss said. “There’s just no way for alternative ATS and airspace, which circumvent what ICAO has allocated, to align with the SESAR goals,” he said.

European organizations have tried unsuccessfully so far to develop a technical workaround that would reduce risk on an interim basis given the practical realities. “With the type of telecommunications technology available, there are means available to mitigate the risk in Nicosia FIR without upsetting the underlying political issue — if the politicians are willing to yield and allow safety to become a priority,” Voss said. “For example, a solution that would make a lot of sense would be to simply make sure that all the controllers have all the aircraft on their displays.”

A past obstacle to this workaround was lack of an official ICAO airport identifier code for Ercan International Airport, impeding the exchange of flight plan data via the networks used in air navigation planning throughout the world. “To directly connect Ercan to another location, ICAO would have had to assign this identifier, which basically would have legitimized the existence of an unrecognized facility,” he added.

Other proposals would have set up sharing of flight plan data through third parties, Voss said. “This might not be possible directly between Ercan and the rest of the world, but via Ankara

Nicosia ACC Reports of Failures to Coordinate Flight Plans and Deviations From ATC Instructions

Type	Year			
	2006	2007	2008	2009
Deviations from published ATM procedures	396	443	497	458
Deviations from ATC clearance	55	32	49	100
Unauthorized penetration of airspace (Nicosia FIR)	373	429	450	390

ACC = area control center; ATM = air traffic management; ATC = air traffic control; FIR = flight information region

Note: Data were furnished in June 2010 to IFALPA by the Department of Civil Aviation, Ministry of Communications and Works, Republic of Cyprus.

Source: International Federation of Air Line Pilots’ Associations (IFALPA)

Table 1

“We’re just trying to make sure that people who have to operate in this airspace can operate safely. We certainly would not want to appear to judge the issue, we just want it resolved.”

FSF Perspectives

The consensus guidance from IFALPA and other aviation organizations advises flight crews to comply with ICAO expectations by monitoring but politely disregarding communication from Ercan ACC controllers, said William Voss, president and CEO of Flight Safety Foundation. Flight crews that operate to and from Ercan International Airport and Ercan Terminal Control Area (TMA) do so outside of the ATS system recognized by ICAO.

“ICAO has said that Nicosia FIR is the only legitimate FIR for Cypriot airspace,” Voss said. “The United Nations only recognizes

ACC so that the exchange would stay within the Turkish government,” he said. “Data simultaneously would be retrievable by authorized third parties. A datalink between Ercan ACC and Ankara ACC would enable sharing data with Eurocontrol — something Ankara does today with its own data — then Eurocontrol could give real-time access to Nicosia ACC and so on.

“By routing the communications that way, there would be no need for ICAO or any other party to formally recognize the disputed airport. That’s still two sets of controllers working the same airspace, but at least they would see each other’s traffic in addition to monitoring the communications.”

Northern Cyprus Perspective

Hasan Topaloglu, director of the Civil Aviation Department of the TRNC, told *AeroSafety World* that Turkish Cypriots decided to operate Ercan International Airport and the associated ATS infrastructure to counteract a historic policy of isolating them. “Perhaps one of the most important restrictions [by the Greek Cypriot side] was one against freedom of travel, preventing direct flights to and from the Turkish Cypriot side with the [sole] exception of [flights to and from] the Republic of Turkey,” he said. “The Ercan ACC and Ercan International Airport, established as a necessity due to the rejection of [requests to] the Greek Cypriots to provide service to the north of the Green Line, have been in service for over 30 years and are technologically up-to-date and effective to ensure flight safety.”

Having made that fundamental policy decision, domestic law of Northern Cyprus was amended to obligate the Civil Aviation Department to implement ICAO standards and recommended practices to accomplish “safe, regular

and swift navigation of the aircraft landing to or taking off from the Turkish Cypriot airports as well as using TRNC airspace,” he said. The position taken is that the legal basis for exercising air traffic control of such flights on ATS Route A-28 is an agreement between the Civil Aviation Department of Northern Cyprus and the Directorate General of Civil Aviation of Turkey, he said. This agreement specifies that for safety purposes, Northern Cyprus controllers have responsibility for air traffic within the southern part of the Ankara [FIR] and on ATS Route A-28, he added.

“Implementation of our Systematic Modernization of Air Traffic Management Project in 2008 enabled us to integrate [two new radar surveillance sensors in Northern Cyprus] with all the radar systems of Ankara ACC, which increased security and safety, and enabled the Ankara ACC to extend assistance where we deem necessary,” Topaloglu said. “We have also increased the number of our controllers, and we are constantly working in close cooperation with the Ankara ACC in order to ensure the safe conduct of all flights in the region. We also monitor the Nicosia ACC controllers’ contacts to make sure safety rules are applied properly.” Total investment in Ercan ACC, control tower buildings and radar sensor replacement was approximately \$25.4 million, he said.

“Approximately 600 aircraft per day pass through the Ercan Advisory Airspace,” he said. “In 2009, 1.8 million passengers used Ercan International Airport. Our prediction is that the traffic will continue to increase, and these figures will be multiplied by two or three in the next decade.”

From the perspective of Ercan controllers, “Nicosia ACC causes problems by contacting flight crews

and telling them to ignore Ercan Advisory Area’s guidance, which is very important for the safety of the flights,” he said. “Under these circumstances, the refusal of the Nicosia ACC to cooperate with the Ercan ACC hinders our efforts to increase flight safety in this area and discourages some flights, which take a detour.”

Examples of issues that Greek Cypriot and Turkish Cypriot aviation safety professionals might be able to address cooperatively include sharing of ATS safety event data and recordings of related pilot-controller communication; lack of coordination when Nicosia ACC routes aircraft off published airways; and differences in how Nicosia ACC controllers and Ercan ACC controllers handle aircraft departing to the south from Antalya, Turkey, in the Ankara FIR under their respective agreements with Ankara ACC, he said.

“These problems can only be solved with good will,” Topaloglu said. “As Turkish Cypriots, we have underlined on many occasions that this is a technical matter, not a political matter, that requires close cooperation of both sides on the island. Since the negotiations for a comprehensive settlement are being conducted under the auspices of the United Nations, we believe that the technical expertise of ICAO, as an expert agency of the United Nations, could facilitate the establishment of such [cooperation] on the island. ... The Turkish Cypriot side is ready to find mutually acceptable technical and operational arrangements, without prejudice to the political and legal positions of the parties.”

Note

1. IFALPA. “ATC Deviation Issues in the Nicosia FIR.” *Air Traffic Services Briefing Leaflet* no. 11ATSBL01, August 2010.