



Justice & Safety

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by **Carmelo Starrantino and Marcello Finocchiaro, EUROCONTROL**

The fact that two Italian Air Force air traffic controllers were convicted of negligence and failing to exercise a sufficient duty of care during the course of providing air traffic service has become quite widely known. However, how this came about is less well understood. What do we know about the court judgments? How could the Italian legal system reach the conclusions that it did?



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This article tries to explain (but not excuse) the rationale that led to the controversial findings/outcomes. It reflects the reality under the current Italian legal system and provides a classic ex-

ample of how difficult it can be to sustain a 'Just Culture' which will support risk management in a safety-conscious industry that is also compatible with the wider public interest in the proper administration of justice.

The two military controllers who had been on duty at Decimomannu and who provided Cagliari APP service to civil traffic were both charged with multiple manslaughter and air disaster for contributing to the death of all 6 occupants of the accident aircraft. The Italian legal process requires that a case of this sort is determined initially in the local criminal court but this judgment may then be referred to an Appeal Court and the determination of the Appeal Court may then be referred to the Supreme Court. This is what happened in this case

The trial before the court of first instance

On 17 March 2008, the Criminal Court of Cagliari sentenced them to two years' imprisonment suspended and to pay, jointly, an interim compensation amount of € 75,000 for civil liability and court costs.

Pilot error was accepted by the Prosecutor and the Court Judge as the immediate cause of the accident. They

concluded that because the pilots had not appreciated the topography of the area surrounding Cagliari, they had erroneously considered it devoid of fixed obstacles.

In addition, the Court also found that the controllers, through their negligent conduct, had made a substantial contribution to the event. Thus the Judge upheld the Prosecutors argument that there were sufficient grounds for finding that there had been concurrent negligent action involving both the pilots and the controllers.

This negligence was qualified as general and specific:

- General in terms of the infringement of standard expectations in terms of diligence, skillfulness and prudence
- Specific in respect of breaches of operational rules, in this case involving those concerning visual approaches, the lack of separation from obstacles and misleading instructions relating to descent.

The Court concluded that the controllers had violated the rules concerning visual approaches, disagreeing with what was affirmed by the Public Prosecutor's experts who had considered that the behavior of the controllers

complied fully with the provisions of ICAO Annex 11 Rules of the Air, ICAO Doc.4444 PANS-ATM and other applicable technical rules and air traffic regulations in force.

The divergence of opinion between the subject matter experts and the Judge was based on the application of specific Italian rules introduced in 1991 by the DGAC (Civil Aviation General Direction). These rules, only applicable in Italy, were enacted through domestic directives No. 41/8879 and 41/8880.¹

For years the existence of these rules was unknown to many pilots and controllers and it wasn't until 1996 that they first appeared in the Italian AIP. Their application in respect of the controllers was a very controversial aspect of the First Instance Judgement. On the one hand, the Public Prosecutor's Experts affirmed that their insertion in the AIP only made them binding on pilots. The Judge on the other hand, was of the opinion that in order for this rule to be applied only to the pilots, it had to relate to a "potestative right" on their part that put them in the position of being able to determine their applicability. Instead, however, he decided that as the controllers had the power to approve or refuse a visual approach to IFR traffic, they too were 'receivers' of the AIP rules.

According to the experts, the relationship between pilots and controllers, with reference to the compliance with technical rules, is founded on a so-called "fidefaciente" statement of the pilot, who is responsible for the consequences that follow from what he states. This view leaves it to the Regula-

tor determine the validity of statements made by pilots rather than the ANSP, because the latter has neither the tools to verify their correctness nor any power of sanction.

ATC's 'Position of Guarantee'

With reference to the crucial issue of the duty to provide separation from obstacles, the Judge affirmed that, because of the prevailing topography in the area of the accident, the controllers had to be more prudent and strictly comply with what was stated in the additional AIP Italy rules. The Judge also ruled that the controllers had to verify the ability of the pilots to address the challenges associated with a night visual approach in the presence of relevant terrain and the possibility of impact during such an approach. Furthermore, controllers were responsible for checking that the pilot was adequately trained, equipped and informed as, in the opinion of the Court, controllers had a "position of guarantee" in respect of the pilot/crew, which involved being proactive in preventing possible aircraft impact with the terrain.

The Court also took into account the nationality of the pilot in command and the Judge took the view that it was easy for the controllers to deduce that he was not aware of the surrounding obstacles. Moreover, according to the Public Prosecutor, the Cagliari APP controller had a specific duty to intervene if an aircraft appeared to be exposed to a dangerous situation, even though its pilot had placed himself in the situation due to his own intent or negligence.

In this case the controller knew that the Citation was heading to Cagliari and might overfly the high terrain of the

Sette Fratelli. It was considered that this view was supported by analysis of the telephone conversations which had taken place between Elmas TWR and Cagliari APP and also by the few traces from the APP radar display which showed that the aircraft was in the area of the Sette Fratelli mountains². In the opinion of the judge this was a very significant matter which strongly affected the position in law of the two controllers.

According to the Judge, if an intervention of the controller is appropriate in order to advise a pilot of the risk of entering prohibited airspace, then the same importance and necessity must be accepted in similar situations such as this accident scenario. That is the controller has a duty to alert a pilot to a potentially unknown (to the pilot) risk.

A further element of negligence noted by the judge was the instruction given by the Cagliari APP controllers to the crew to "...continue not below 2500 feet, further descent with Elmas Tower...". The Minimum Safe Altitude (MSA) in the Sette Fratelli area was 5700ft and in the view of the Court the instruction may have misled the pilots into believing that it was safe to descend to 2500ft in an area where the height of the surrounding mountains was over 3000 ft. In addition, in the opinion of the Judge, the descent instruction might have led the pilots to think that the 5700ft MSA was not related to the topography of the area but to the needs of air traffic management and the prevention of aircraft crossing the protected departure and arrival routes of other airports in the vicinity.

1- In effect these directives represented an additional requirement to the provisions of ICAO PANS ATM applicable to pilots of all aircraft undertaking the carriage of passengers or goods for the purposes of Public Transport. The first one (41/8879) specifically prohibited the use of visual approaches at night for general aviation traffic but not for the commercial air transport, category of which the accident flight was an example. The second one (41/8880) then set six pre-conditions to be satisfied by flights permitted to make a night visual approach as follows including that an alternative instrument approach procedure should be unavailable.

2- One of them admitted to have noticed on the Monti Codi radar monitor that the Citation was en route towards Cagliari crossing the "Sette Fratelli" zone. The controller assessed that the contact was 'weak' and not usable for the provision of radar assistance – which in any case was unnecessary for the ongoing (visual approach) procedure. However, when it was clear that the accident had occurred and it was necessary to locate the wreckage, he was able to use the information to inform the search and rescue activities.

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The judicial aftermath

So, according to this Court, there had been a violation of the controllers' duties of prudence, diligence and skilfulness. Furthermore, because they had failed to provide a timely alert to the pilot after a misleading descent instruction, they had acted in a grossly negligent manner.

The court of appeal

On 18 March 2010, the Cagliari Court of Appeal essentially upheld the judgment of the Lower Court, whilst also finding further evidence of negligence.

The Appeal Judges affirmed that the controllers were aware of the 'dangerous' position of the accident aircraft thanks to the information they had received from Rome ACC, which had controlled the first part of the flight. They then did not provide essential information on the topography of the terrain, thus violating one of the duties set down in the Italian DGAC Directive No. 41/8880.

The Appeal Judges surmised that the controllers' failure to provide useful information for a safe and efficient conduct of the flight was also a violation of ICAO Annex 11 paragraph 2.2 (d). They also found that the defendants had violated the technical rules of air traffic control because the manner of the transfer of control prior to landing had infringed the Italian Air Force "Ordine di Servizio" No. 102, which stated that the transfer of responsibility from APP to TWR in the case of an aircraft approaching to land must take place when the aircraft was in the proximity of the airport. In this case, the transfer of the control took place when the aircraft was 26 nm from the runway.

According to the Judges, the transfer of control to Elmas TWR should have taken place when the aircraft was between 5 and 10 nm on final approach. They

cited the instance when during the night of 23 February (the day before the accident) the same aircraft had landed at Cagliari Elmas to pick up the medical team involved in the heart transplantation, had been cleared for a visual approach procedure only when it was 10 nm away from the airport, notwithstanding that on this occasion it came from the North and so was overflying an area without obstacles. Furthermore, before the transfer to Elmas TWR, the APP controllers had informed the pilot about its position, (as seen on radar), about 7 miles far from the runway. This contrasted with the accident flight only a few hours later when no such position information was provided.

The supreme court of cassation

The judicial proceedings came to an end with the decision of the Supreme Court of Cassation, which delivered its judgment on 10 December 2010 and upheld the previous two judgments.

Unlike the previous judgements, the verdict of the Supreme Court did not mention the DGAC Directive No. 41/8880, but focused instead on establishing the nature of the ATC role with reference to the separation between the aircraft and terrain or obstacles. The Judges affirmed that controllers have a 'policing' function, whereby they are managers and administrators of pilots, on whom they impose discipline, through clearances, which are administrative instructions, in order to ensure the safe, orderly and expeditious flow of air traffic.

'The Position of Guarantor' in the protection of 'Goods'

In the opinion of the Court, regardless of any technical ATC rules, the duty of controllers to separate the aircraft from terrain and obstacles and the duty to do everything possible to ensure a safe

flight, is based on their 'guarantee position' towards aircraft occupants.

According to Italian statute law, there are some very important 'goods' or interests (in this case human life) which, by their nature, require an enhanced protection without which they could not continue to exist. The principle applies to situations where the legal system – given the incapacity of the owners of the 'goods' to ensure complete protection – deems it necessary to determine a threshold of advanced protection, establishing a 'guarantee position' in the hands of third parties who, through proactive behaviours, can support the enhance protection of these fundamental 'goods'.

Given the existence of this principle, the Court considered that the controllers – within their competences aimed mainly at managing the regular flow of air traffic departing, landing and en route – must act proactively to try to eliminate or at least reduce the risk of an aircraft accident once they notice that an aircraft is in a 'dangerous' position.

Pursuant to Article 40 (par.2) of the Italian Criminal Code which states: "Not to prevent an event that is a legal obligation to prevent is equivalent to causing it", it was considered that it was irrelevant that ICAO Annex 11 paragraph 2.2 does not include prevention of collision of obstacles as a function of air traffic control in the circumstances which prevailed in the accident. The judges reasoned that the controller, as well as the pilot, has to be considered as a 'guarantor' in order to ensure the safety of navigation and in general in order to avoid aviation disasters.

The determination of Negligence

The Supreme Court also addressed some of the specific 'negligence' aspects related to the case. The Judges

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took the view that the controllers' conduct was negligent, incompetent and careless because they did not promptly appreciate the abnormality and danger of the pilot's route and underestimated the existence of conditions which could be thought of as non-standard and improper for the safe conduct of aircraft navigation. They considered that the element which characterized the specific culpability of the controllers concerned a violation of the provisions of ICAO Doc 4444, PANS ATM, paragraph 4.3.2.1.1 where it is stated that "the control of an arriving aircraft shall be transferred from the unit providing approach control service to the unit providing aerodrome control service when the aircraft: a) is in the vicinity of the aerodrome...". So, in the opinion of the Supreme Court, the visual approach clearance has to be provided only when the aircraft is in the proximity of the aerodrome.³

ATC Authority and 'Clearance'

Another important aspect examined in the Supreme Court's judgment concerned the nature of a 'clearance'. The Court tried to associate the ATC 'clearance' for a night visual approach within the normal 'administrative' qualification system existing in Italy. According to this principle, the power to grant a permission (to proceed) presupposes that the person who issues the permission must verify that the necessary (safety) conditions are in place. In the absence of such conditions, the person should not issue the 'clearance'. A statement from a pilot confirming the existence of all the necessary conditions should not be the basis for issuing of a clearance which is dependent upon them being satisfied because a pilot's perspective might not always

be sufficient to meet every legal requirement.

In terms of this general principle, the issuing of a clearance by a controller must therefore always be preceded by a check carried out by the same person and this is demonstrated by the fact that a such a check is also necessary in case of "silence/assent" or "fidefaciente statement" when, by the deadline for its release, the competent authority can always require the receiver (the pilot) to clarify or to produce additional documents, and in their absence the releasing body (controller) should deny the clearance request.

On the contrary, the lawyers acting for the controllers argued that it is not practicable to place the current air traffic controller clearance responsibilities within the standard 'administrative' framework. The authorisation implicit in a clearance should not be considered as an 'administrative' act that can only produce effects if the recipient is willing to comply. Rather, they argued that an ATC 'clearance' doesn't have any coercive power to impose specific behaviour on the recipient. The pilot in command is in reality not bound to unthinkingly comply with a clearance but is able to deviate from it in the interests of safety. So therefore a 'clearance' cannot be considered as an 'administrative' act but as an instruction in the wider sense.

The Supreme Court also dealt with a matter not covered by ICAO concerning the presumed duty of the controller to issue clearances not only for the requirements of safety, but also in response to pilot requests to expedite traffic (e.g. for short-cuts, direct routings) and flight efficiency (fuel, time)

reasons. Notwithstanding ICAO Annex 11 paragraph 2.2 obliges ATC to maintain a safe, orderly and expeditious air traffic flow, the Court stressed that when ATC provides a clearance it should not be influenced by any requests from a pilot to reduce the duration of the flight or the fuel consumption because these are private economic interests of aircraft operator. The decision-making process of the controller must be guided by and prioritise the primary requirement to preserve flight safety.

The Court opined that since a clearance does not have mandatory status in all circumstances, it can and should be followed only if it is safe to do so. The objective of a clearance can be evaluated only in association with safety considerations and never autonomously. On that basis, the Judges concluded that controllers must comply with their professional duty concerning the obligation to ensure both the regular flow of air traffic and the safe operation of aircraft.

Conclusion

In Italy at least, there is a need for the judiciary and aviation professionals to be more aware of each others perspectives on criminal prosecution and operational issues connected with ATM. This case exemplifies how international aviation provisions are subject to the interpretation of Judges, given that the administration of justice is a prerogative of each State acting alone. It is nowadays widely acknowledged that an improved dialogue and a mutual understanding between the Judiciary and specialist professionals is the only way to make progress and move forward in terms of Just Culture development. **S**

³ - After the Court of Appeal judgement the Italian Air Force suspended the visual approach procedure at domestic airports and ENAV did the same after the Supreme Court judgement. Nowadays, the Air Force permits the visual approach procedure only for military aircraft. On the civil side, ENAC has drafted a new procedure but so far it is not in effect.