

FLIMSY
TCAS RA Display to Controllers: legal assessment
(by the EUROCONTROL and DFS legal services)

A. Meaning of “responsible for providing separation”

Section 4.1 of PANS-ATM (ICAO Doc. 4444), entitled ‘Responsibility for the Provision of Air Traffic Control Service’ establishes and delimits the tasks of the area, approach, and aerodrome control services, respectively, from an operational perspective. Similarly, the notion ‘responsibility’ in the context of rule 15.7.3.3 does have operational significance, but this does not serve to suggest that the meaning of the term is confined to the operational sense. In our view, for reasons discussed below, the term ‘responsibility’ in the context analysed has a legal meaning.

To begin with, it should be said that the word ‘responsibility’ intrinsically has a legal connotation. It is “a fundamental building block of legal thought and reasoning”.¹ Black’s law dictionary defines responsibility as one’s mental fitness to answer in court for his or her actions.² Responsibility is the obligation to personally fulfil a duty, requiring accountability for actions taken or decisions made.³ Such duty is created not only by relevant legal regulations governing the provision of the service, but also by the relationship which exists between the controller and the pilot.⁴

It is worth noting that a duty can consist not only in performing certain acts, but also in abstaining or refraining from carrying out such (negative obligation).⁵ One example is provision 15.7.3.2, specifically imposing a duty on the controller not to issue clearances for the aircraft that has reported a TCAS RA, in order to avoid the issuance of conflicting instructions. The controller bears legal responsibility for adhering to this prohibition in the same way he is responsible for the performance of positive obligations, i.e. the duty to issue separation clearances in normal circumstances. It is submitted that it should be examined from an operational and legal perspective to formulate provision 15.7.3.3 as negative obligation similar to 15.7.3.2, in order to improve its clarity.^a

Already in 1964 when it first addressed the issue of the legal responsibility of air traffic control, the ICAO Legal Committee noted that it is inherent in any service undertaken if another person relies upon it.⁶ As P.B. Larsen observes, when the control agency assumes control over the navigation of the aircraft (e.g. during an IFR flight), the pilot-in-command relies upon ATC instructions. However, when the pilot is flying a VFR flight, obtaining assistance from, but not being controlled by the ATC, there is no reliance.⁷ Likewise, provision 15.7.3.3 of PANS-ATM describes a scenario where the pilot ceases to rely on instructions given by the controller (relying instead on TCAS instructions), which is why the controller cannot be held liable for the period during which he is not asked to perform a duty others rely on.

Provisions of Annex 2 to the Chicago Convention “Rules of the Air” on the interaction of the pilot-in-command and the air traffic control officer outline the

^a If it is not decided to merge provisions 15.7.3.2 and 15.7.3.3 into one, see below under C.

specific duties of each, thereby helping determine their legal responsibility, or in other words, “on whom to lay the blame in case of an accident”.⁸ However the close cooperation between the pilot-in-command and the controller does not always allow for a strict delimitation of the legal responsibility between the two of them, which is often concurrent. PANS-ATM rules, such as provision 15.7.3.3, help discern the responsibility of the pilot-in-command from that of the controller in case of accidents. As W. Schwenk writes, in a collision resulting from the pilot’s reliance on TCAS instructions rather than those of the controller, the latter cannot be held liable.⁹

Opining on the duty of care owed to others by air traffic controllers, the legal experts of the UK CAA maintain that the depth and boundaries of this duty cannot be defined in advance and will only ultimately be decided by the court when examining the specifics of the situation at hand.¹⁰ In this respect R. Abeyratne exemplifies that the air traffic controller generally would not be held liable for a mid air collision when the pilot was flying under VFR, as it is the pilot’s duty to “see and be seen”.¹¹ However, there is an increasing tendency of courts holding ATCO-s liable for the negligent performance of their duties, irrespective of whether such duty is incorporated in the controller’s manual or not,¹² which is why it is important to have internationally applicable rules such as PANS-ATM provision 15.7.3.3 that clearly state when the controller is relieved of the duty to provide separation, and hence also of the legal responsibility for its correct performance.

Finally it should be noted that rule 15.7.3.3 is not the only provision of PANS-ATM in which the term responsibility has a legal connotation. Likewise, provisions of PANS-ATM on air traffic control clearances employ the term ‘responsibility’ as a legal notion of accountability, serving as an additional argument in favour of such interpretation of rule 15.7.3.3. To illustrate the point, rule 4.5.1.3 states that “ATC clearances do not... *relieve* a pilot-in-command of any *responsibility* whatsoever in connection with a *possible violation* of applicable rules and regulations”.¹³ Moreover, other ICAO documents of a similar nature, such as the ACAS Manual (ICAO Doc. 9863), also seem to refer to the legal meaning of responsibility. For example, under provision 6.3.2.5 of the ACAS Manual (that follows a restatement of the PANS-ATM rule 15.7.3.3 in provision 6.3.2.4) controller training should emphasise that the use of ACAS does not alter the respective responsibility of pilots and controllers.¹⁴ The use of the word ‘responsibility’ in the singular and not plural form in this context precludes the conclusion that the sole meaning attached to this provision is the operational division of tasks between the controller and pilot-in-command.

B. Criteria to determine affected aircraft

Since, as discussed above, TCAS RAs have an impact on the responsibility of controllers for the provision of separation, it is necessary to determine the extent of such responsibility. While PANS-ATM is unambiguous as to when the controller ceases to be responsible for the separation and later resumes responsibility, it does not clearly define the scope of aircraft no longer requiring ATC separation.

Provision 15.7.3.3 of PANS-ATM makes reference to the aircraft that departs from its ATC clearance or reports an RA, but also to “aircraft affected as a direct consequence

of the manoeuvre induced by the RA". From an operational point of view, it seems to be very difficult to precisely predefine this constellation, as the number of aircraft involved will depend on the specific situation and the instructions given by the TCAS equipment.

Upon being informed of an issued RA, the controller will definitely cease to be responsible for separating that aircraft from other traffic. However, while climbing or descending in accordance with the RA, this aircraft might end up on conflicting paths with other aircraft flying on a higher or lower flight level. As long as this triggers new RAs, controllers should be relieved of responsibility for providing separation for such traffic, since this is in line with the original purpose of rule 15.7.3.3.

However, the ambiguity of rule 15.7.3.3, as currently worded, lies in the fact that it can also be interpreted as encompassing aircraft that have not yet issued RAs even if they have become affected by the RA-induced deviation of the original aircraft. To relieve controllers from responsibility in this case may be undesirable, as it would entail, for a number of aircraft, the loss of ATC service, which, however brief, may seriously compromise safety and greatly reduce the situational awareness of controllers.

For this reason, the suggested merger of provisions 15.7.3.2 and 15.7.3.3 in a single, concise rule seems appropriate, as by limiting the notion of "affected aircraft" to those that have issued RAs, it would resolve the ambiguity and clarify the extent of the controller's responsibility for providing separation, as well as formulating more clearly the negative obligation not to modify the flight path until the situation is resolved. With a view to a possible implementation of RA downlink, from a legal perspective it may perhaps also be worth considering the following wording:

15.7.3.2 Once informed of an RA, the controller:

- a) ceases to be responsible for providing separation for that aircraft; and*
- b) shall not attempt to modify the aircraft flight path until informed of "Clear of Conflict".*

as an alternative to the proposal focusing on pilot reporting. This broader phrase would cover RA downlinks as well as pilot reporting, and might be less susceptible to amendment in the long term, should relevant systems be implemented in the future.

¹ P. Cane, *Responsibility in Law and Morality*, 2002, at 1.

² Black's Law Dictionary. 7th Ed. West Group. St. Paul, Minn., 1999.

³ R. M. Jenney, *Pilot In Command: Authority, Responsibility, Accountability*. Cockpit Leadership: The Pilot's Handbook 2003, at 1.

⁴ Shawcross and Beaumont. *Air Law*. Issue 124, 2010 at VI-49.

⁵ J. Huang, *Aviation Safety Through the Rule of Law: ICAO's Mechanisms and Practices* 2009, at 232.

⁶ ICAO Doc. 8 302-LC/150-2. 1964, Secretariat Report, at 164.

⁷ P.B. Larsen, *Liability of Air Traffic Control Agencies to Foreign Air Carriers*, *Journal of Air Law and Commerce*, Vol. 32, No. 1, at 136.

⁸ I.H.Ph. Diederiks-Verschoor, *An Introduction to Air Law*, Kluwer Law International 2006, at 198.

⁹ W. Schwenk, *Position of Pilots and Controllers Under the Existing ATM System*. 15/04/1999, at 3.

¹⁰ UK Flight Information Services. CAP 774, 2009, Appendix A, at 1.

¹¹ R. Abeyratne, *Air Navigation Law* 2012, at 49.

¹² Ibid, at 50, Shawcross and Beaumont. *Air Law*. Issue 124, 2010 at VI-49.

¹³ PANS-ATM. ICAO Doc. 4444. [emphasis added].

¹⁴ ACAS Manual. ICAO Doc. 9863. 6.3.2.5.