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QUESTION

# Before a surveillance service starts, what must a controller do with the aircraft?


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**ANSWER**

Identify the aircraft and tell the pilot. Keep the identification until the service ends.

ATS.TR.155(d); ICAO Doc 4444 8.6.2.1.1-8.6.2.1.2


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QUESTION

# What must a controller do when identification is lost?


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**ANSWER**

Tell the pilot and, where applicable, give the instructions that apply.

ATS.TR.155(d); ICAO Doc 4444 8.6.2.1.1-8.6.2.1.2


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QUESTION

# Unknown traffic is a collision hazard. What must the controller do, whenever practicable?


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**ANSWER**

Tell the identified pilot about the traffic, offer avoiding action if asked or warranted, and tell the pilot when the conflict ends.

SERA.7002(a)(1)-(2); ATS.TR.155(e)(1)-(2); ICAO Doc 4444 8.8.2.1


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QUESTION

# Does traffic information relieve a VFR pilot of responsibility for terrain and obstacles?


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**ANSWER**

No. The VFR pilot stays responsible for terrain, obstacles and staying in VMC.

GM3 SERA.7002(a)(1)


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QUESTION

# A vector would take a VFR flight into cloud. What is good practice?


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**ANSWER**

Tell ATC at once that you are unable, give the reason, and ask for an alternative. Do not follow the heading.


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QUESTION

# What are the four items used to describe conflicting traffic?


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**ANSWER**

Relative bearing as a 12-hour clock position; distance in km or NM; direction of travel; level and type, or relative speed if the type is unknown.

AMC1 SERA.7002(a)(1) point (a)(1); AMC1 ATS.TR.155(e); ICAO Doc 4444 8.8.2.3 a); AMC1 SERA.7002(a)(1) point (a); AMC1 ATS.TR.155(e) point (a); GM1 to (a)(1) and GM1 to (a)(4) of AMC1 SERA.7002(a)(1); ICAO Doc 4444 8.8.2.3


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QUESTION

# What replaces the clock positions when describing traffic during a turn?


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**ANSWER**

Compass points can replace the clock positions in a turn.

AMC1 SERA.7002(a)(1) point (a); AMC1 ATS.TR.155(e) point (a); GM1 to (a)(1) and GM1 to (a)(4) of AMC1 SERA.7002(a)(1); ICAO Doc 4444 8.8.2.3


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QUESTION

# Name the ways a controller can identify an aircraft with SSR or MLAT.


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**ANSWER**

Its label, a verified discrete code, its Mode S identification, a transfer, a code it was told to set, or its response to IDENT.

AMC1 ATS.TR.155(c)(1) point (b)(1)(i)-(vi); ICAO Doc 4444 8.6.2.3.1


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QUESTION

# With primary radar only, how can a controller match a blip to an aircraft?


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**ANSWER**

To the aircraft's reported position over a point, with a consistent track.

AMC1 ATS.TR.155(c)(1) point (c)(1)(i)-(iv); ICAO Doc 4444 8.6.2.4.1


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QUESTION

# Primary radar only: a departed aircraft matches a blip. How far from the runway end?


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**ANSWER**

Within 1 NM of the runway end.

AMC1 ATS.TR.155(c)(1) point (c)(1)(ii); ICAO Doc 4444 8.6.2.4.1 b); AMC1 ATS.TR.155(c)(1) point (c)(1)(i)-(iv); ICAO Doc 4444 8.6.2.4.1


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QUESTION

# Primary radar only, under ATC: which heading change identifies the aircraft?


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**ANSWER**

A heading change of 30° or more, when instructed by ATC.

AMC1 ATS.TR.155(c)(1) point (c)(1)(iv)(A); ICAO Doc 4444 8.6.2.4.1 d); AMC1 ATS.TR.155(c)(1) point (c)(1)(i)-(iv); ICAO Doc 4444 8.6.2.4.1


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QUESTION

# Which conspicuity code is assigned when Mode S downlinked identification is used?


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**ANSWER**

A1000, instead of a discrete code, for eligible flights in declared airspace.

Appendix 1 to Part-ATS points (b)-(d); ATS.OR.446(b); Appendix 1 to Part-ATS points (a)-(d)


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QUESTION

# What makes an SSR code a discrete code?


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**ANSWER**

Four digits, and the last two digits are not "00".

GM1 Annex IV (Part-ATS); GM1 Annex IV (Part-ATS) "discrete code"


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QUESTION

# After identifying a departing aircraft within 1 NM, is its position needed?


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**ANSWER**

No, when the observed position is consistent with the departure time.

AMC1 ATS.TR.155(c)(2) point (a)(1)(i); ICAO Doc 4444 8.6.4.1 a) i); AMC1 ATS.TR.155(c)(2) point (a)(1)-(5); ICAO Doc 4444 8.6.4.1


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QUESTION

# How close to the airspace boundary can a controller vector an aircraft?


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**ANSWER**

Not closer than 2.5 NM, except at a transfer of control or where local arrangements protect separation.

AMC1 ATS.TR.155(c)(3) point (a)(2); ICAO Doc 4444 8.6.5.1 c); AMC1 ATS.TR.155(c)(3) point (a)(2); GM2 to AMC1 ATS.TR.155(c)(3); ICAO Doc 4444 8.6.5.1 c)


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QUESTION

# When the separation minimum is greater than 5 NM, what is the vectoring limit?


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**ANSWER**

Half the separation minimum from the airspace boundary.

AMC1 ATS.TR.155(c)(3) point (a)(2); AMC1 ATS.TR.155(c)(3) point (a)(2); GM2 to AMC1 ATS.TR.155(c)(3); ICAO Doc 4444 8.6.5.1 c)


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QUESTION

# Is a controlled flight normally vectored into uncontrolled airspace?


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**ANSWER**

No. Only in an emergency, to avoid adverse weather (pilot told), or at the pilot's specific request.

AMC1 ATS.TR.155(c)(3) point (a)(3); ICAO Doc 4444 8.6.5.1 d)


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QUESTION

# Is a special VFR flight normally vectored?


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**ANSWER**

No. Only when special circumstances, such as emergencies, require it.

AMC1 ATS.TR.155(c)(3) point (b); ICAO Doc 4444 8.10.1.2


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QUESTION

# When vectoring ends, what does the controller tell the pilot?


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**ANSWER**

To resume own navigation. If the vectors took the aircraft off route, also the position and any needed instructions.

AMC1 ATS.TR.155(c)(3) point (c); AMC1 ATS.TR.155(c)(2) point (a)(4); ICAO Doc 4444 8.6.5.5


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QUESTION

# A surveillance service is interrupted. How soon must the pilot be told?


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**ANSWER**

Immediately.

AMC1 ATS.TR.155(c)(10); ATS.TR.155(c)(10); ICAO Doc 4444 8.6.7.1


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QUESTION

# A flight exempt from compulsory reporting points: when must it resume position reports?


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**ANSWER**

When instructed, when told the service ends, or when told identification is lost.

SERA.8025(a)(2)(i)-(iii); ICAO Doc 4444 8.6.4.4


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QUESTION

# What is the default horizontal separation minimum with radar, ADS-B or MLAT?


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**ANSWER**

5 NM.

AMC1 ATS.TR.210(c)(2) point (a); AMC1 ATS.TR.210(c)(2) points (a), (b)(1), (b)(2)(i)-(viii); GM1 to AMC1 ATS.TR.210(c)(2) point (f)


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QUESTION

# What is the general reduced horizontal separation minimum with radar, ADS-B or MLAT?


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**ANSWER**

3 NM, the lowest general value, when the provider establishes it, the authority approves it and the system permits.

AMC1 ATS.TR.210(c)(2) point (b)(1); AMC1 ATS.TR.210(c)(2) points (a), (b)(1), (b)(2)(i)-(viii); GM1 to AMC1 ATS.TR.210(c)(2) point (f)


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QUESTION

# Complete surveillance failure, radio working: what temporary level spacing is used?


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**ANSWER**

Half the applicable vertical separation minimum, as a temporary emergency measure.

GM2 ATS.TR.155(c)(7); GM1 and GM2 ATS.TR.155(c)(7); GM1 to AMC1 ATS.TR.210(c)


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QUESTION

# Outside RVSM airspace, what level tolerance applies?


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**ANSWER**

±300 ft.

AMC1 ATS.TR.155(f); AMC1 ATS.TR.155(g) point (a); AMC1 ATS.TR.155(f)


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QUESTION

# How far can the competent authority tighten the outside-RVSM tolerance?


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**ANSWER**

Down to ±200 ft, the smallest value the authority can set.


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QUESTION

# Inside RVSM airspace, what level tolerance applies?


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**ANSWER**

±200 ft.

AMC1 ATS.TR.155(f); AMC1 ATS.TR.155(g) point (a); AMC1 ATS.TR.155(f)


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QUESTION

# After clearance to leave a level, when has the aircraft vacated it?


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**ANSWER**

When the readout moves more than 300 ft away from the level in the expected direction.

AMC1 ATS.TR.155(g) point (c); AMC1 ATS.TR.155(g) points (a)-(e)


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QUESTION

# When has a climbing or descending aircraft passed a level?


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**ANSWER**

When it is more than 300 ft beyond that level.

AMC1 ATS.TR.155(g) point (d); AMC1 ATS.TR.155(g) points (a)-(e)


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QUESTION

# How long within tolerance before an aircraft has reached its cleared level?


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**ANSWER**

3 display updates, 3 sensor updates or 15 s, whichever is greatest.

AMC1 ATS.TR.155(g) point (e); AMC1 ATS.TR.155(g) points (a)-(e)


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QUESTION

# How often must the displayed pressure-altitude level be verified?


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**ANSWER**

At least once, on initial contact or as soon as possible afterwards, unless the authority says otherwise.

ATS.TR.155(f); ATS.TR.155(f); AMC2 ATS.TR.155(f)


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QUESTION

# Which height is used to verify the displayed level?


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**ANSWER**

Not geometric (GNSS) height. The check compares the displayed pressure-altitude level with the altimeter level the pilot reports.

ATS.TR.155(f); AMC2 ATS.TR.155(f)


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QUESTION

# Where does a normal surveillance radar approach end?


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**ANSWER**

2 NM from touchdown, unless the authority allows it closer, or clutter or a visual report comes first.

GM3 to AMC2 ATS.TR.155(c)(3) point (b)(6)(i); GM1 Annex IV (Part-ATS) "radar approach"; GM3 to AMC2 ATS.TR.155(c)(3) point (b)(3)-(6)


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QUESTION

# What does a controller give during a surveillance radar approach?


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**ANSWER**

Heading corrections and distance or level information. It is an IFR procedure.

GM1 Annex IV (Part-ATS) "radar approach"; GM3 to AMC2 ATS.TR.155(c)(3) point (b)(3)-(6)


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QUESTION

# When vectoring a VFR flight, what must the controller avoid, and which tracks are preferred?


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**ANSWER**

Avoid taking the flight inadvertently into IMC. Prefer tracks the pilot can monitor with navaids.

GM1 to AMC1 ATS.TR.155(c)(3) points (b), (c); ICAO Doc 4444 8.6.5.1 a), 8.10.1.3


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QUESTION

# On the same final approach track, what reduced minimum between succeeding aircraft is possible?


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**ANSWER**

2.5 NM, within 10 NM of the threshold, only when the listed conditions are met and the authority approves.

AMC1 ATS.TR.210(c)(2) point (b)(2); AMC1 ATS.TR.210(c)(2) points (a), (b)(1), (b)(2)(i)-(viii); GM1 to AMC1 ATS.TR.210(c)(2) point (f)


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