Aviation Comparisons – <u>Annex 11.</u>

If it wasn't so important it would be humorous. How, after 77 years complying with the Chicago Convention and its Annexes, we still cannot get it right? The following are Annex 11 definitions and references to Annex requirements.

Annex 11 Items	Australian Differences notified	FAA Differences Notified
Accepting Unit	Nil	The term "receiving facility" is used.
Accident	Australia requires reporting of 'transport safety matters', which are equivalent to those contained in the Annex 11 definition of an accident.	Nil
Air traffic service	Air traffic service means a service of a kind mentioned in Annex 11, other than a certified air/ground radio service.	Nil
Advisory Airspace	Nil	Advisory service is provided in terminal radar service areas and the outer area associated with class C airspace areas as well as Class E airspace.
Advisory Route	Nil	Advisory service is provided in terminal radar service areas and the outer area associated with class C airspace areas as well as Class E airspace.
ACAS- Airborne Collision Avoidance System	Nil	Traffic Alert and Collision Avoidance System (TCAS) - An airborne collision avoidance system based on radar beacon signals which operates independent of ground-based equipment. 14 CFR 1.1 further defines and breaks down TCAS into TCAS 1 - provides traffic advisories 2 - provides traffic advisories and resolution advisories in the vertical plane and 3 - provides traffic advisories and resolution advisories in the vertical and horizontal planes.
AIRMET	Nil	FAA Pilot Controller Glossary defines (in part) AIRMET as "A concise description of an occurrence or expected occurrence of specified en route weather phenomena that may affect the safety of aircraft operations, but at intensities lower than those that require the issuance of a SIGMET." The ICAO definition of AIRMET narrows the purpose of the advisory to "low-level aircraft operations", where the FAA has a more broad definition to encompass "all aircraft andaircraft having limited capability" Also, ICAO uses the term "forecastfor the flight information region" where the FAA uses "area forecast". Difference in character (terminology) for area forecast. FAA uses AIRMETS for broader purpose.
Air taxiing	Nil	The U.S. does not limit this definition to apply only to above the surface of an aerodrome.

Annex 11 Items	Australian Differences notified	FAA Differences Notified
Air traffic control service	Nil	The U.S. uses "Air Traffic Control" with a definition of "A service operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic."
Air traffic flow management (ATFM)	Nil	The U.S. does not define air traffic flow management
Air traffic control unit	Nil	The U.S. uses the term "air traffic control facility". (i.e., En Route, Terminal, or Flight Service)
Air traffic services reporting office	Nil	FAA Pilot Control Glossary defines (in part) Flight Service Stations (FSS) as "air traffic facilities which provide pilot briefing, en route communications and VFR search and rescue services, assist lost aircraft in emergency situations, relay ATC clearances, originate Notices to Air Missions, broadcast aviation weather and NAS information, receive and process IFR flight plans" FSSs are available to receive any reports concerning air traffic services as well as accept and file flight plans.
Air traffic services unit	Nil	The U.S. uses "Air Route Traffic Control Center".
Airway	Nil	A Class E airspace area established in the form of a corridor, the centerline of which is defined by radio navigational aids.
Alert Phase	Nil	Alert - a notification to a position that there is an aircraft-to-aircraft or aircraft-to-airspace conflict as detected by automated problem detection.
Altitude	Nil	Height above ground level (AGL), mean sea level (MSL) or indicate altitude.
Approach Control Service	Nil	The U.S. not only includes arriving and departing controlled flights but also includes en route controlled flights. Additionally, as opposed to Annex 2 Amdt 47, the U.S. specifies the control facility that provides the service.
Approach Control Unit	Nil	The U.S. uses "Approach Control Facility" and also includes the possibility of providing ATS to en route aircraft.
Appropriate ATS Authority	Nil	The U.S. does not define "Appropriate ATS Authority." The P/CG does contain a definition annotated as [ICAO] that adds "In the United States, the "appropriate ATS authority" is the Program Director for Air Traffic Planning and Procedures, ATP-1."
Apron	Nil	The U.S. adds reference to seaplane operations to the definition.
Apron Management Service	Nil	Ground control or ramp control provide the same service. There is no formal definition in the Pilot Controller Glossary.
Area Control Centre	Nil	The U.S. uses the terms "Traffic Control Center", "Radar Approach Control Facility", and "Tower" to define a facility that provides air traffic control service to aircraft operating on IFR flight plans within

Annex 11 Items	Australian Differences notified	FAA Differences Notified
		controlled airspace and principally during the en route phase of flight. When equipment capabilities and controller workload permit, certain advisory/assistance services may be provided to VFR aircraft.
Area Control Service	Nil	Air Traffic Control - A service operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic.
Controlled flight	Nil	The US uses the term "Surface Area". Surface area is airspace
Control Zone	Nil	contained by the lateral boundary of the Class B, C, D, or E airspace designated for an airport that begins at the surface and extends upward.
Cruising Level	Nil	Cruising Altitude - an altitude or flight level maintained during en route level flight. This is a constant altitude and should not be confused with a cruise clearance.
Danger area	Australia also designates some danger areas as 'military operating areas'. Flight within military operating areas may be subject to conditions.	Nil
Data Quality	Nil	The U.S. does not define data quality in its ATS operational documents.
Datum	Nil	The U.S. does not define datum in its ATS operational documents.
Declared capacity	Nil	The U.S. does not define declared capacity in its ATS operational documents.
DETRESFA	Nil	The U.S. does not define DETRESFA, although the P/CG does contain DETRESFA [ICAO].
Distress phase	Nil	The U.S. does not define distress phase, although the P/CG does contain the Annex 11 Amdt 52 verbiage in the definition of DETRESFA [ICAO].
Downstream Clearance	Nil	Same as air traffic control clearance. Authorization for an aircraft to proceed under conditions specified by an air traffic control unit.
Duty	Nil	While "duty" is frequently used in ATS documents and Title 14 of the U.S. Code of Federal Regulations, the U.S. does not define duty in its ATS operational documents.
Duty period	Nil	While "duty period" is used in ATS documents and Title 14 of the U.S. Code of Federal Regulations, the U.S. does not define duty period in its ATS operational documents
Emergency phase	Nil	The U.S. defines 'emergency' but only uses some of the language from the Annex 11 Amdt 52 definition of "emergency phase".
Final Approach	Nil	The U.S. defines the aspects of "Final Approach" separately.

Annex 11 Items	Australian Differences notified	FAA Differences Notified
Flight Information Centre	Nil	In the US, flight information service and alerting service are often provided by flight service stations.
Flight level	Nil	The U.S. uses the measurement of a level of constant atmospheric pressure related to a reference datum of 29.92 inches of mercury instead of 1 013.2 hectopascals (hPa).
Geodetic Datum	Nil	The U.S. does not define Geodetic datum in aeronautical publications.
Height	Nil	The U.S defines Height as the height above ground level (or AGL) expressed in meters or feet.
Human Factors principles	In Australia, human factors principles means principles concerned with the minimisation of human error and its consequences by optimising the relationships within systems between people, activities and equipment	Nil
INCERFA		The U.S. does not define INCERFA.
Incident	Australia requires reporting of 'transport safety matters', which are equivalent to those contained in the Annex 11 definition of an incident.	Nil
Level	Nil	The term "altitude" is used.
Manoeuvring Area	Nil	Any locality either on land, water, or structures, including airports/heliports and intermediate landing fields, which is used, or intended to be used, for the landing and takeoff of aircraft whether or not facilities are provided for the shelter, servicing, or for receiving or discharging passengers or cargo.
Meteorological office	Nil	No PCG definition. However FSSs perform this duty.
Movement Area	Nil	The runways, taxiways, and other areas of an airport/heliport which are utilized for taxiing/hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and parking areas. At those airports/heliports with a tower, specific approval for entry onto the movement area must be obtained from ATC.
Non-duty period	Nil	The U.S. uses the term "rest period."
NOTAM	Nil	The U.S. uses NOTICE TO AIR MISSIONS (NOTAM).
Obstacle	Nil	The U.S. limits its definition of obstacle to an existing object, object of natural growth, or terrain at a fixed geographical location.
Pilot-in-command	Nil	The person who has final authority for the operation and safety of the flight has been designated as pilot in command before or during the flight and hold the appropriate category, class and type rating for the flight.
Prohibited area	Nil	The U.S. allows flight into prohibited areas with proper permissions. Special use area.

Annex 11 Items	Australian Differences notified	FAA Differences Notified
Radio navigation service	Nil	The U.S. describes its radio navigation services in AIP GEN 3.4 but does not define it.
Radiotelephony only	Nil	The U.S. does not explicitly define radiotelephony.
Runway visual range (RVR)	Runway visual range means the range, measured using an electronic instrument, over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.	Nil
Traffic avoidance advice	Nil	US uses the term "Safety Alert"
Traffic information	Nil	US uses the term "Traffic Advisory"
Transferring unit	Nil	The U.S. uses the term "TRANSFERRING CONTROLLER."
Uncertainty phase	Nil	The U.S. does not define uncertainty phase.
Waypoint	Nil	A predetermined geographical position used for route/instrument approach definition, progress reports, published VFR routes, visual reporting points or points for transitioning and/or circumnavigating controlled and/or special use airspace, that is defined relative to a VORTAC station or in terms of latitude/longitude coordinates.
2.3.2	Nil	Annex 11, paragraph 2.3.2 directs the flight information service to accomplish objective d) of para 2.2, "to provide advice and information for the safe and efficient conduct of flight." Details on procedures to accomplish this objective are contained in FAA Order JO 7210.3, Part 4, Flight Service Stations. Specific procedures for accomplishing this objective are contained in FAA Order JO 7110.10, Flight Services. Also, the FAA Pilot Controller Glossary defines a Flight Service Station (FSS) as an air traffic facility which provides pilot briefings, flight plan processing, en route flight advisories, search and rescue services, and assistance to lost aircraft and aircraft in emergency situations. FSSs also relay ATC clearances, process Notices to Air Missions, and broadcast aviation weather and aeronautical information. In Alaska, FSSs provide Airport Advisory Services.
2.5.2.2.1	Nil	FAA uses the generic term "controlled airspace" and "surface areas"
2.5.2.2.1.1	Nil	FAA also provides this service in Class E.
2.5.2.2.2	Nil	Annex 11, paragraph 2.3.2 directs the flight information service to accomplish objective d) of para 2.2, "to provide advice and information for the safe and efficient conduct of flight." Details on procedures to accomplish this objective are contained in FAA Order 7210.3, Part 4, Flight Service Stations. Specific procedures for accomplishing this objective are contained in FAA Order 7110.10, Flight Services. Also, the FAA Pilot Controller Glossary defines

Annex 11 Items	Australian Differences notified	FAA Differences Notified
		Flight Service Stations as "air traffic facilities which provide pilot briefing, en route communications and VFR search and rescue services, assist lost aircraft and aircraft in emergency situations, relay ATC clearances, originate Notices to Air Missions, broadcast aviation weather and NAS information, receive and process IFR flight plans, and monitor NAVAIDs. In addition, at selected locations, FSSs provide En Route Flight Advisory Service (Flight Watch), take weather observations, issue airport advisories, and advise Customs and Immigration of trans-border flights."
2.6.1	Nil	The U.S. has chosen not to use Class F airspace.
2.6.3	Australia applies the following speed limitations to both IFR & VFR aircraft within Class D airspace: 1.200kt IAS – at or below 2,500ft AAL within 4NM of the primary Class D aerodrome (see note 1); or 2.250kt IAS – in other Class D airspace below 10,000ft AMSL. Note 1: If traffic conditions permit, ATC may approve a pilot's request to exceed the 200kt speed limit to a max limit of 250kt unless the pilot informs ATC a higher minimum speed is an operational requirement. Australian policy for Class D airspace applies	Nil
2.11.3.2	Australian airspace is established in some CTA with a base of 500FT	Nil
2.11.3.2.1	Australian airspace is established in some CTA with a base of 500FT	Nil
2.11.3.2.2	While generally compliant with this recommendation, lower limits of some control areas coincide with an IFR cruising level.	Class E-5 700/1200-foot airspace areas are used for transitioning aircraft to/from the terminal or en route environment.
2.11.3.3	Nil	En Route Domestic Airspace Areas consist of Class E airspace that extends upward from a specified altitude to provide controlled airspace in those areas where there is a requirement to provide IFR en route ATC services but the Federal airway structure is inadequate. En Route Domestic Airspace Areas may be designated to serve en route operations when there is a requirement to provide ATC service but the desired routing does not qualify for airway designation. Offshore/Control Airspace Areas are locations designated in international airspace (between the U.S. 12-mile territorial limit and the CTA/FIR boundary, and within areas of domestic radio navigational signal or ATC radar coverage) wherein domestic ATC procedures may be used for separation purposes.
2.11.5.1	Nil	A Class D airspace area shall be of sufficient size to: 1. Allow for safe and efficient handling of operations. 2. Contain IFR arrival operations while between the surface and 1,000 feet above the surface, and IFR departure operations while between the surface and the base of adjacent controlled airspace. Size and shape may vary to provide for 1 and 2. The emphasis is that a Class D area shall be sized to contain the intended operations.

Annex 11 Items	Australian Differences notified	FAA Differences Notified
2.11.5.3	Nil	Refer to Surface Areas. The U.S. uses the term "Surface Area". Surface area is airspace contained by the lateral boundary of the Class B, C, D, or E airspace designated for an airport that begins at the surface and extends upward.
2.13.4	Not implemented. Australia does not differentiate between RNAV and conventional ATS routes in its use of route designators	Nil
2.14.1	Not implemented. Change-over points are not used in Australia.	Nil
2.14.2	Not implemented. Change-over points are not used in Australia.	Nil
2.26.5	Nil	No time is issued prior to taxi for take-off. Time checks are given to the nearest quarter minute.
2.28.1	Partially implemented. Australia has adopted only the standards for Fatigue Risk Management System (FRMS), as provided for in subparagraph 2.28.1 b). Australia does not prescribe scheduled limits as provided for in subparagraph 2.28.1 a).	Nil
2.28.2	Partially implemented. Australia accepts only an FRMS as the means for an ATS provider to manage its fatigue-related safety risks.	Nil
2.28.3	Partially implemented. Australia accepts only an FRMS as the means for an ATS provider to manage its fatigue-related safety risks.	Nil
2.29	Nil	Process is described in the FAA Safety Management System Manual and the FAA Order 1100.161.
2.31.2	The English language is used exclusively in air traffic service communications	Nil
2.33.1	Australia also designates some danger areas as 'military operating areas'. Flight within military operating areas may be subject to conditions	Nil
2.33.3	Australia does not prefix identifications with nationality letters. Australia allocates the letter M for identifying military operating areas.	Nil
2.34	Australian regulations do not require a quality management system but instead require a Safety Management System and procedures for verifying design work.	Nil
3.2	Nil	Air Route Traffic Control Facilities (ARTCC) are used instead of Area Control Service, and Terminal Control Facilities instead of Approach Control Service.
3.3.3	Australia does not record background communication.	Nil
3.6.2.4	Nil	The U.S does not specify notification of 2-way communication. The accepting unit shall not alter the clearance of an aircraft that has not yet reached the transfer of control point without the prior approval of the transferring unit.

Annex 11 Items	Australian Differences notified	FAA Differences Notified
3.7.1.1	In addition to issuing a pilot with a specific ATC clearance, ATC may also authorise an aircraft to enter Class D airspace by establishing 2- way communications with it.	Nil
		Air crews are not required to read back clearances, only to acknowledge receipt of clearances. Certain air traffic controller safety-related parts of ATC clearances
		and instructions which are transmitted by voice and which must be read back according to US requirements.
3.7.31	Nil	"Ensure pilots acknowledge all Air Traffic Clearances and ATC Instructions. When a pilot reads back an Air Traffic Clearance or ATC Instruction:
		Ensure that items read back are correct. Ensure the read back of hold short instructions, whether a part of
		taxi instructions or a LAHSO clearance.
		Ensure pilots use call signs and/or registration numbers in any read back acknowledging an Air Traffic Clearance or ATC Instruction.
3.7.3.1.1	Nil	Air crews are not required to read back clearances, only to acknowledge receipt of clearances.
3.7.3.3	There is no specific legislation requiring vehicle drivers operating on the manoeuvring area to read back ATC instructions. However, in practice ATS will require vehicle drivers to read back instructions to enter, hold short of, cross and operate on any operational runway or taxiway.	The U.S. only requires a read back for operations regarding hold short instructions. Controllers may request a read back whenever they feel a read back is necessary.
3.7.4.3	Nil	4-3-8. COORDINATION WITH RECEIVING FACILITY Coordinate with the receiving facility before the departure of an aircraft if the departure point is less than 15 minutes flying time from the transferring facility's boundary unless an automatic transfer of data between automated systems will occur, in which case the flying time requirement may be reduced to 5 minutes or replaced with a mileage from the boundary parameter when mutually agreeable to both facilities.
3.7.4.4	Nil	4-4-5. CLASS G AIRSPACE Include routes through Class G airspace only when requested by the pilot. NOTE-1. Flight plans filed for random RNAV routes through Class G airspace are considered a request by the pilot. 2. Flight plans containing MTR segments in/through Class G airspace are considered a request by the pilot. Air Traffic Control Clearance means an authorization by air traffic control within controlled airspace.
3.10.1	Partially implemented. Displays utilised for surveillance services provide safety related alerts and warnings as recommended. Some non-surveillance towers are provided situational awareness displays	Nil

Annex 11 Items	Australian Differences notified	FAA Differences Notified
	for position information only. These displays are not capable of displaying safety related alerts and warnings	
4.2.2	Partially implemented. In Class E and Class G airspace, a VFR aircraft is provided specific information concerning collision hazards (traffic information) only if: a. the aircraft is within surveillance system coverage and b. the pilot is receiving a surveillance information service (the aircraft is identified).	No Class F airspace. Collision Hazard information is provided between known traffic to aircraft in Class G airspace.
4.3.2.3	HF operational flight information service (OFIS) broadcasts are not provided in Australia.	Nil
4.3.2.4	HF operational flight information service (OFIS) broadcasts are not provided in Australia.	Nil
4.3.4.8	ATIS broadcasts may exceed 30 seconds	Nil
4.3.7	Partially implemented. Transition level is not transmitted on ATIS.	Nil
5.1.3	Aerodrome control towers and approach control units may directly notify the rescue coordination centre if an event has no impact on an area control centre.	Nil
6.1.1.4 (6.2.2.3.8)	Nil	The US uses a 45 day retention period.
6.1.3.3	ATC can monitor HF, but not transmit directly.	Nil
6.2.3.6	Nil	The US has a 45 day or longer retention period, with some exceptions. US en route facilities using system analysis recording tapes as their radar retention media shall retain radar data for 15 days. Facilities using a teletype emulator or console printout must be retained for 30 days unless they are related to an accident or incident. A facility using a console typewriter printout take-up device may retain the printout on the spool for 15 days after the last date on the spool. If a request is received to retain data information following an accident or incident, the printout of the relative data will suffice and the tape/disc may then be returned to service through the normal established rotational program.
6.3.1.3	Nil	The US has a 45 day or longer retention period except that those facilities utilizing an analog voice recorder system shall retain voice recordings for 15 days.
6.4.1.2	Nil	The US retains surveillance data recordings for 45 days or longer when they are pertinent to an accident or incident investigation, except that en route facilities using system analysis recording tapes as their radar retention media (regardless of the type of voice recorder system being used) shall retain voice recordings for 15 days and those facilities using an analog voice recorder system shall retain voice recordings for 15 days. FAA's Air Traffic Control System Command Center shall retain voice recordings for 15 days.

Annex 11 Items	Australian Differences notified	FAA Differences Notified
7.1.3.3	Not implemented. Units providing approach control service are not equipped with surface wind display(s), but are provided with wind information by other means.	Nil
7.1.3.4	Not implemented. Aircraft on final approach are usually transferred to the aerodrome control frequency, who can then provide RVR information.	Nil
7.1.5	Nil	The term "communication station" is not used but the flight information is passed.
7.6	Nil	Temporary Flight Restrictions (TFRs) are the mechanism that would be implemented in such cases.
11.1.2	Nil	U.S. uses different emergency messages. FAA Order JO 7110.10, Chapter 3, Emergency Services.