

SAFETY & TECHNICAL UPDATE

MAGGIE TRAN, SAFETY & TECHNICAL OFFICER



The Safety and Technical (S&T) Team continues to participate in a number of forums and undertake activities to ensure that safety levels are maintained in Australia and globally through IFALPA. The following is a brief outline of some of the current issues which your Safety and Technical Committee has been engaged in.

ACCIDENT ANALYSIS AND PREVENTION (AAP)

Safety Interview Representation

Since May, the AAP Portfolio has represented members from both Jetstar and Qantas in six safety interviews and one ATSB interview.

If you are involved in an incident or accident, call the AIPA 24 hour Accident/ Incident Hotline on +61 (0)2 8307 7788 for advice.

ATSB Chief Commissioner

AIPA has written a letter to the new ATSB Chief Commissioner, Greg Hood, congratulating him on his new role and requesting an opportunity for AIPA to meet with the ATSB to discuss matters of mutual concern including enhancing the MOU between AIPA and the ATSB.

AIRCRAFT DESIGN AND OPERATIONS (ADO)

IFALPA ADO Committee Meeting

Capt. Shane Tobin represented AusALPA at the IFALPA ADO Committee Meeting in Madrid. A number of papers were discussed and many have resulted in action items for development into Policy Papers or Briefing Leaflets. The Committee coordinates seven Permanent Work Programs. There are four Hot Topics – namely Flight Controls, RPAS, Environmental Issues, and Runway Excursions.

AERODROME AND GROUND ENVIRONMENT (AGE)

IFALPA Annex 14 Section 4.3 Policy

AusALPA's AGE Portfolio was tasked by IFALPA to review and update the current IFALPA Annex 14 Section 4.3 policy in relation to objects outside the OLS (e.g. buildings causing wind disturbance to aircraft). This draft has now been circulated amongst the IFALPA AGE Committee for comments and will be formalised at its next meeting in November.

Brisbane Airport Capacity Enhancement (ACE) Program

In May, AusALPA was accepted onto the Brisbane ACE Steering Committee. The ACE Program is a national scheme commissioned by Airservices in collaboration

with airports and industry stakeholders to address the growing demand at Australia's major airports. Its aim is to identify opportunities to improve efficiency and to increase the utilisation of existing infrastructure in order to increase runway capacity. It is hoped that AusALPA will be invited to take part in steering committees of other airports.

AIR TRAFFIC SERVICES (ATS)

Airline/Air Traffic Services Safety Forum

The Airline/ATS Safety Forum is an annual invite only event that brings together delegates from international, domestic and regional airlines, air navigation service providers and other aviation organisations from across the Asia Pacific region.

The theme this year is 'safety versus efficiency in aerodrome operations: are they mutually exclusive?' AusALPA has been invited to make a presentation on "Runway Safety in High Intensity Operations".

HUMAN PERFORMANCE (HUPER)

Amendment of ICAO Annex 1

ICAO, through IFALPA, has issued a State letter requesting comments from the HUPER Portfolio on the proposal for the amendment of Annex 1 regarding automatic validation of licences between Contracting States. The intention of the amendment is to improve the mobility of licensed personnel, while preserving safety, though IFALPA has raised some concerns.

SECURITY & DANGEROUS GOODS (SEC/DG)

Post Implementation Review of "Two in the Cockpit" Policy

As a result of the Germanwings' disaster in 2015, the "Two in the Cockpit" policy was introduced, with the procedures to be reviewed after one year following its implementation. Although somewhat delayed, CASA's undertaking to review the procedures took place in May, with the objective to consider the provision of ongoing security and safety requirements and to determine its effectiveness.

AusALPA responded by noting that the policy was a useful, immediate action to re-establish public confidence, however, no risk assessment was done prior to implementation. AusALPA recommended that CASA lead a transparent and formal risk assessment, attended by airline operators and professional pilot associations with the objective to crystallise what risks exist and what mitigation is actually necessary.

OTHER MATTERS

Future CASA Industry Consultation System

AusALPA has been advised that, following a review, its membership of the Standards Consultative Committee (SCC) has been downgraded to observer status. It is now a concern that the membership of the SCC represents a particularly unbalanced concentration of advice.

AusALPA has made known that excluding workforce representative associations from full SCC membership was unacceptable and highlighted that the proposed members of this advisory group are all representatives with vested commercial and economic interests. In addition, it has pointed out that management representatives of operators do not, and cannot, represent the views of their pilot workforces.

AusALPA strongly recommended that the Association be reappointed as a full member of the advisory mechanism, noting that full membership appropriately reflects both our consistent S&T contributions and the true characteristics of membership as demonstrated in the ASTRA Council and FAA advisory models.

CASA Director's Advisory Panel (DAP)

There is, however, some good news in terms of the consultative process with CASA. The Aviation Safety Regulation Review report highlighted the need for CASA to improve consultation with stakeholders, resulting in the establishment of a working group tasked with reviewing current consultation arrangements. Drawing on the views and recommendations of that working group, AusALPA has been invited to become a member of the newly formed CASA Director's Advisory Panel (DAP).

The purpose of the DAP is to provide to the CASA CEO and Director of Aviation Safety, informed, objective high level advice on current, emerging and potential issues that have, or may have, significant implications for aviation safety and the way CASA performs its functions.

Our industry continues to operate in a challenging environment influenced by many factors which can alter the balance between profitability and safety standards. Nonetheless, as this year progresses, AusALPA remains dedicated to preserving and advancing standards of safety domestically and internationally. If you have any concerns or would like further information, please do not hesitate to contact our office via safety.technical@aipa.org.au.

BOM: behind the scenes



ALEX DUNBAR, SECOND OFFICER (AGE PORTFOLIO CHAIRMAN)

AusALPA has been involved with the Bureau of Meteorology (BoM) Graphical Area Forecast (GAF) working group since March 2014. The purpose of the working group has been to align area forecasts, AIRMETs, and SIGMETs with ICAO Annex 3. Following industry consultation and requests for a graphical product, the BoM has outlined plans for a revised area forecast, SIGMET, AIRMET and Grid Point Wind Temperature (GPWT) products. The current ARFOR product will be replaced with two separate products, the GAF and the GPWT. GAFs will provide information on weather, cloud, visibility, icing, turbulence and freezing level in a graphical format whilst the GPWT will display wind speed, direction and temperature forecasts at specific heights above mean sea level in a gridded format.

The working group consisted of representatives from the BoM, Airservices Australia, CASA, Regional Aviation Association of Australia, Aircraft Owners and Pilots Association, Defence Department and AusALPA.

GRAPHICAL AREA FORECAST

With the introduction of the GAF planned for November 2017, the area forecasts will now be divided into ten areas. New South Wales, Queensland and West Australia will be split in two, while every other state will be provided with a dedicated area forecast. To reduce duplicate forecasting, the BoM will limit the current ARFOR vertical limit to 10,000 feet (A100) within its forecasts from 10 November 2016. Following this change, upper level weather forecasts (above A100) will be supported by mid- and high-level SIGWX charts. The incoming GAF product would be issued every 6 hours with a minimum of 30 minutes lead in time for validity purposes. Two GAF products would be issued covering a 6 hour period each, culminating in 12 hour validity for the user. The primary aim of the GAF is to enhance product viewability in an attempt to mitigate any possible

confusion or clutter.

Rather than amending the GAF once it is issued, an AIRMET will be promulgated to notify pilots of specific changes to meteorological conditions. Collectively, the GAF and AIRMET products will work simultaneously to provide both recreational and professional pilots with the required operational information to conduct their flight safely.

AIRMET

AIRMET changes are planned to come into effect on 10 November 2016 to conform with ICAO Annex 3. These changes will include the use of approved ICAO abbreviations, introduction of sequence numbers to track the validity of an AIRMET, and the inclusion of the RMK (Remark) line to support the new GAF product. Another significant change will see the validity of an AIRMET reduced to four (4) hours, to align with the issuance of a new GAF.

In its most basic form, an AIRMET will be issued to report a weather phenomenon that has resulted in a degradation of the weather. The format of the new AIRMET messages will be similar to a SIGMET but for moderate, rather than severe conditions. To support friendly pilot interaction and use, the BoM plans to produce a graphical representation of AIRMETs, similar to the current graphical SIGMET products. These graphical AIRMET products will be available in the chart directory of NAIPS upon the changes taking effect.

SIGMET

In November 2016, the BoM will also be making changes to the SIGMET format. The changes involve updates to the SIGMET sequence numbers and the remarks line.

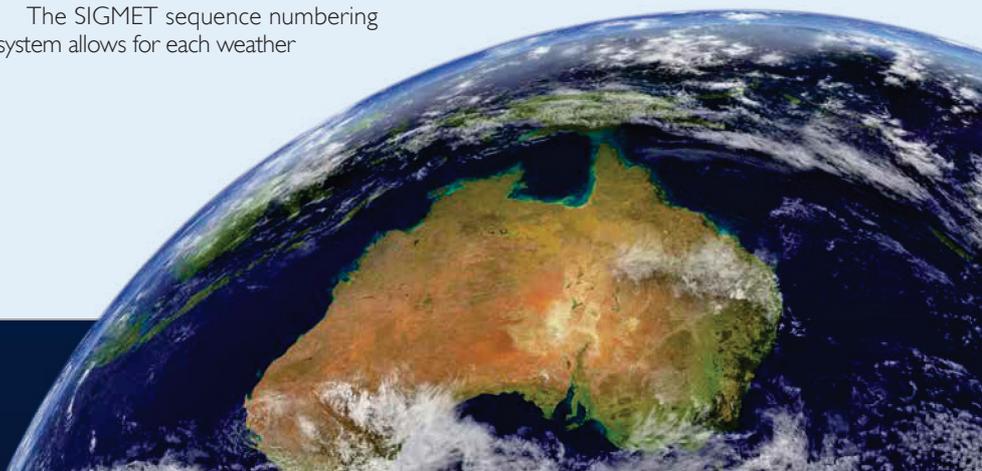
The SIGMET sequence numbering system allows for each weather

phenomena to be marked with a two digit number, per Australian FIR. Each new SIGMET issued will be '01' and count upwards per amendment until '99'. The sequence number portion will no longer reset at 0001 UTC, as occurs today. Should more than '99' SIGMETs be issued for a particular event, it will then reset to '02' to indicate a continuing event. '01' will be withheld for only newly issued SIGMETs.

Currently the remarks line indicates whether the SIGMET is a new (NEW), extended (EXTD) or cancellation (CNL) of a SIGMET. As these parameters can all be easily derived from the SIGMET they were deemed redundant and no longer required.

- NEW SIGMET will have a sequence number 01;
- EXTD will have a sequence number between 02 and 99 and will not contain CNL SIGMET in its body; and
- CNL SIGMET will contain the text CNL SIGMET in its body, rather than describe a SIGMET phenomenon.

These changes affecting GAF, SIGMET and AIRMET products are aimed at providing pilots and the entire aviation industry with a user friendly product, while achieving the goals of aligning ourselves with ICAO Annex 3. The BoM continues to work with third party vendors to ensure the various flight planning software and applications have the necessary data and information to produce a product for the 21st century aviator. It is our hope at AusALPA that the industry embraces these changes, while recognising that the Bureau plans on providing the industry with clear, concise and readily available meteorological information.





REMOTELY PILOTED AIRCRAFT SYSTEMS

MAGGIE TRAN, SAFETY & TECHNICAL OFFICER

BACKGROUND

Previously referred to as Unmanned Aerial Vehicles (UAVs), the term Remotely Piloted Aircraft Systems (RPAS) was introduced in 2011 by ICAO to reflect both the human and technical components required to operate an aircraft with no pilot on board. Since its introduction, RPAS has been a controversial topic of discussion within the aviation industry. Of major concern is its operation within civilian airspace and its possible impact on the operation of manned aircraft.

According to Airservices Australia, RPAS has been the fastest growing area within the industry in recent years, with over 700 commercial RPAS certified operators registered with CASA as of mid-2016. RPAS are used for, but not limited to, firefighting, search and rescue, law enforcement, border patrol and fishing trawlers.

ICAO REMOTE PILOTED AIRCRAFT SYSTEMS PANEL

In 2014, the International Civil Aviation Authority (ICAO) established a RPAS Panel with the aim of efficiently integrating RPAS into non-segregated airspace and aerodromes whilst maintaining the existing levels of safety for manned aircraft. The International Federation of Air Line Pilots' Association (IFALPA) is currently an active member on the Panel alongside a number of other member states, including Australia.

Furthermore, with the purpose of providing an education tool for states and other industry stakeholders, the ICAO Manual on Remotely Piloted Aircraft Systems was released in 2015.

The document highlights the changes which will come into play for RPAS and provides a summary of the Standards and Recommended Practices (SARPs) and guidance material.

In addition, ICAO has been cooperating with global corporations including Google, Facebook and Amazon to enhance the visibility of safety guidelines to its users.

The panel expects to complete the SARPs for air traffic management and "detect and avoid" requirements for RPAS by 2020.

AUSTRALIA'S RESPONSE

In 2002, Australia became the first country in the world to regulate RPAS through CASR Part 101 which consolidated the rules governing all unmanned aeronautical activities.

An Unmanned Aircraft Systems (UAS) Standards sub-committee was also established to oversee the development of regulations and standards pertaining to UAS, including UAS operations, licensing and certification, manufacture and maintenance. It should be noted that the scope of the sub-committee does not focus on privacy, ethical or security matters. Members of the sub-committee include CASA, as well as key stakeholders within the aviation community such as manufacturers, operators and AusALPA.

CASR Part 102, to be published in 2018, will incorporate the most up-to-date information.

In the interim CASA has announced amendments to Part 101 that have been registered on the Federal Register of Legislation and will come into effect 29 September 2016.

IFALPA'S POSITION

IFALPA believes that UAS technology including RPAS will not be an acceptable replacement for human capabilities, particularly when exposed to complex and safety critical situations and as such, opposes to the idea of utilising UAS in place of pilots in any type of air transport operations.

In terms of UAS integration into civilian, non-segregated airspace, IFALPA believes that this can only be achieved if UAS operations comply with all existing rules and regulations applicable to other aircraft operating within the same class of airspace. It is not acceptable for such rules and regulations to be changed for manned aviation in order to accommodate UAS operations.

For more information on the IFALPA Policy, please visit <http://www.ifalpa.org/downloads/Level1/IFALPA%20Statements/Aircraft%20Design%20&%20Operation/13POS04%20-%20Unmanned%20Aircraft%20Systems.pdf>

AusALPA is currently seeking a representative with an interest in representing the Association in all RPAS related matters. If you are interested in this position or any other role on the Safety and Technical Committee, please contact AIPA at safety,technical@aipa.org.au.