THE AVIATION COMMUNITY MEDICAL LIAISON GROUP
– Meeting Minutes 2 June 2015

DATE:	Tuesday 2 June 2015
LOCATION:	Civil Aviation Authority, Level 15, Asteron House, 55 Featherston Street, Wellington, Room 15.04
TIME:	1000-1430

PRESENT:

- Ben Johnston, Medical Officer – AMSNZ
- Bruce Burdekin, Representative - Sport and Aircraft Association NZ Inc
- Claude Preitner, Senior Medical Officer - Civil Aviation Authority of NZ
- Desrae Martin, Administrator - Civil Aviation Authority of NZ
- Dougal Watson, Principal Medical Officer - Civil Aviation Authority of NZ
- Ian Andrews, President - Aircraft Owners and Pilots Association of NZ
- John McKinlay, Manager – Personnel and Flight Training
- John Byers, Representative - Sport and Aircraft Association NZ Inc
- Judi Te Huia, Team Leader, Aviation Medicine – Civil Aviation Authority of NZ
- Kim Smith, Airways NZ
- Lew Jenkins – Airways NZ
- Richard Small, Representative – Flying NZ, Royal New Zealand Aeroclub, NZ Aviation Federation
- Phil McGuire – CVA Group
- Stephen Brown, Medical Executive Member – Aircraft Owners and Pilots Association of NZ
- Sue Telford, President – NZ Women in Aviation
- Samantha Sharif, Chief Executive – Aviation New Zealand
- Tim Sprott, Medical Officer – Air NZ
- Tim Woods – CVA Group

APOLOGIES:

- Herwin Bongers, Medical Director – NZ Airline Pilots Association
- Mike Haines, Head of Policy and Standards - Airways
- Rajib Ghosh, Senior Medical Officer - Civil Aviation Authority of NZ
- Rob Griffiths – Otago University
- Simon Ryder-Lewis, Specialist Occupational Medicine – ATC Mutual Benefit Fund

AGENDA

Welcome and Introduction

John welcomed all attendees, including new members Lew and Sue. Tim and Phil attended to discuss Colour vision. The terms of reference and purpose of the meetings were briefly outlined.

ACTIONS FROM THE PREVIOUS MEETING

All actions were updated on the Actions Sheet.

Summary

1. Vector article on demystifying processes – AMC and Aviation Related Concerns *published May/June 2015 edition*
2. MIS 004 and GD for Temporary Medical Conditions which do not need reporting – *MIS 004 on hold, GD on Temporary Medical conditions currently with the CAA legal team*

Kim has published MATS which mentions MIS004 and asked CAA to release it ASAP. Claude explained that MIS004 was drafted several years ago, and the GD legal framework needs completing before an MIS is released, unfortunately there is no timeline available. Claude reflected that it has taken a long time to get to this stage of the GD. Dougal outlined that the issue was compliance with the ACT regarding; not reporting and not flying.
John Byers felt this delay reflects badly on the medical team.
Sue asked what changes were there to the GD. The GD has not been finalised and an Act revision was not an acceptable option. Airways experienced increased reporting since the MATs advisory was published.

3. Online system update

Subject to the funding review and this is still a priority. It falls under government decision making and as such has no firm timeline.
Action – the group requested any further information on progress, requesting expected timeframes.
Tim wanted it noted that the lack of action in this area is a hole in the safety management system of CAA and hugely disappointing.
Ian expressed his dismay that nothing has been achieved in two years and asked what the comments from CASA V2 online were? Dougal did not know whether such a system had potential to start here and any decision on a system lies with Senior Management. The CASA online system trial should be finished soon and go live in September. John Byers was concerned that the government has had a disappointing record of implementing large systems. The group strongly recommended electronic record management systems and online systems. Ian reiterated that $50000 could have done secured an online system. In addition, Tim identified a risk in data protection and privacy between MEs and CAA, he considered Healthlink would be a more secure option. Ian felt the group had been put on the back burner in regards to an online system, nothing had happened apart from money being thrown at an issue with no results. Bruce earnestly suggested that CAA (Medical Management)

refocus on a simple online medical form and get this moving. Tim agreed that better proficiency would help all parties.

4. Medical Fee/Funding Review

Action - the group requested further information on the Funding Review in light of their submissions and no accessible update via the CAA website.

Medical numbers have changed from 8000 to 7000 and Ian suggested an acceptable application fee of $50. John explained that the application fee is set by government. Ian understands that consultation costs are high and for clarity will seek the cost of this particular funding review. John Byers said it seems to be impossible to influence changes, and felt frustrated when reflecting on at all the work that has gone into implementing this change. Sue summarised that as a voice the group hopes someone hear them. Ian agreed that this would be the greatest achievement of the ACMLG.

TOPICS FOR CONSIDERATION

DRUGS AND ALCOHOL

MoT Clearheads Discussion Paper consultation – initial feedback submissions have closed. Representatives from the MoT presented their roadshow at the Fatigue Risk Management meeting. For more information here is the website.

Marijuana – CAA do not have legislation to undertake random testing for this drug, it can be highlighted by a wide range of sources. They are dealing with issues fairly often. Bruce outlined research which recently identified that a single joint has the same lung cancer effect as smoking ten cigarettes. This could indicate numbers for this disease could be on the rise.

First time DIC - Ian had a member who had first DIC in all his driving history (over 70 years old), a $250 fine, and CDT (carbohydrate deficient transfer) tests every three months and accumulating costs. Why is CAA going so hard on this? Dougal directed the group to the MIS 014 and outlined that the approach and policies have not changed since this was written in 2011. He offered the option of convener if required.

Stephen felt the MIS reads well but application and approach do not reflect this. CDT has a 5% error rate, meaning teetotallers could come back with a positive test. CDT has a half-life spanning between 3 days and 5 weeks. It costs $800 a year for blood tests for someone who has not had an issue before.

CDT is a monitoring tool not a diagnostic tool. An older pilot who DICs later in life would be treated the same way by an Air NZ ME, who would consider it a red flag. It's a marker of consumption, an action such as DIC requires further exploration, education and moderating.

Is there a point where testing ceases? Dougal said when they are satisfied everything is okay, and remains okay. Other tools can be used or combination of tools. Overtime CAA steps back; halves the frequency, and steps back the level of surveillance over time.

Stephen presented another case of a DIC at 19 and then later in his 40s. Liver cells were tested instead of CBT. Tim warns of being deceived by the applicants. Air NZ MEs agree with the red flag which could indicate a relapse into old behaviours. Tim is conservative in this aspect, the longer he sees it. Information from many sources can be taken into consideration; peers, spouses, health professionals and specialists in the field- it is a complicated area. Addicts are known to lie and operate in denial, which delivers a false perception around the problem. Aeromedical significance indicates a progressive illness in which people lose control. HIMS was developed as a substance abuse treatment program link here .US airlines rehabilitated and returned to work pilots within this programme. Claude outlined binge drinking impairment is up to 72 hours. It is a difficult area, it's hidden and driven underground and people themselves are blind to it.

Stephen feels that the communication lines are not working particularly well and the people being picked on are not the ones who should be. Tim outlined that random testing has not been found in to be effective as indicators, there have been negative tests where a person has a problem. CDT and random testing are not definitive answers. Withdrawal fit in the cockpit has occurred and there is a cultural issue here, normalisation of alcohol use. See the HIMS programme website for further information on where to go for assessment. We are trying to prevent incidences before they occur. Air NZ have run a very good system by adopting the HIMS model.

DEPRESSION

See Psychological Issues below.

CARDIOVASCULAR ISSUES

See research topics below.

PSYCHOLOGICAL ISSUES

CASA CAA Joint Harmonisation workshop - **10 July 2015** (Mental health issues and screening).

Germanwings Tragedy *(see hand out by Dougal Watson)*

Dougal outlined that the group was aware of the basic circumstances; 150 lost souls, due to health and mental health of the pilot. He cautioned the knee-jerk response on depression/suicide. Murder/suicide and its reporting were the main issues. Dougal had been in contact with ICAO on this issue. EASA has convened a working group (closed). There was an FAA committee looking at aircrew mental health issues. In NZ, s27C shows a strong system in place with respect to the issue that was being raised. A doctor knew this issue but did not need to tell the Regulator - in our system he would be obliged to. If the doctor doesn't know they are an aviator, it would not be reported. The group discussed disclosure by pilots.
Germanwings has heightened these issues to the medical profession - there is a growing awareness, in NZ the Medical Council published s27C requirements in its newsletter. CAA have been trying to increase awareness and are experiencing less pushback and more acceptance as doctors accept their

exposure to this risk. Ben thought that the system breaks down when the operator may not know there is an issue with the pilot, there are some areas which need to be improved.
Sue identified aviation as a tight community and information where relevant is generally disclosed. Lew suggested using peers as moderators to assess risk. Airways had undertaken a study of risk analysis on solo tower operators. Bruce suggested CAA could report back to the operator- closing the loop at the end of the reporting chain. CAA notifies the operator where appropriate; however, the speed at which this has occurred due to written, faxed or posted communication, has been an issue. Dougal asked for the work Airways undertook in assessing the risk of a solo operators in a tower situation.
Action - Lew to provide Dougal with the results of the risk analysis

Detecting someone in this extreme mental health space would rely on encouraging reporting. Some would be prevented from entering the Aviation system. Others are calculating, and unwilling to disclose their issues, these are the highest risk. Depression alone is generally managed well.
How do you deal with the calculating people? Tim outlined that they have a strong desire to not tell. What aspects of the system could be adjusted so the appropriate people find out? CAA has a good system, but it doesn't mean laurels can be rested upon. CAA was in a good position to respond to this issue. Stephen feels very uncomfortable that GPs diagnose mental health problems. A generation of gamers make very good pilots but it is difficult to assess their perception of the world – their reality. Samantha outlined that the formal requirement is the rules, and built around that is a just culture (peer observation), creating a formal and informal safety management framework. There is a sensitivity issue in dobbing in mates.

What are the problems we are trying to solve here? Are there things preventing capable people being aviators? There is a need to prioritise. The group agreed that safe people are allowed into the system, unsafe people are kept out. What are the key things to make the biggest differences?

Underreporting of medical conditions is prevalent around the world, could this be used as a research topic?
It might point to areas where education can be used to reduce the stigma of mental health issues. Ian asked whether we are having accidents in NZ relating to mental health issues?
Tim said that autopsies in the US revealed that what was found in bodies (tranquillisers, painkillers, drugs) had never declared as being used on medical assessments.
What are the risks? Are there better ways of managing them?

FATIGUE RISK MANAGEMENT PROJECT

Fatigue risk management group is on the website here
The expected outcome is to revamp the policy in this area, review the advisory circular and produce educational material specific to industry requirements.

EDUCATION

Research project

There were two issues for CAA here, one was a lack of funding available for the last financial year, the other is due to low resource availability at Auckland University for a Cochrane Literature Review (where existing data is analysed). CASA will carry out research on stroke and TIA with Monash University, which will provide the industry with a significant resource.
John explained that money was still set aside in the next financial year (2015-2016), a cost estimated at $25000. John Byers asked whether CAA could apply for funding for other research? Dougal was

unaware of anything being available to a government authority. Could another university provide the research? This could be looked into.
A possible topic for such a study was to research **new generation cardiovascular investigation tools.** We could put it out to multiple universities for consideration. The most prevalent cases CAA would come under conditions such as neurological, mental health and cardiovascular. The purpose for a study would be to improve the understanding of an issue; to give us published best evidence of what the risks are; expand, consolidate and assure. A new generation cardiovascular study would identify how useful the tools are for the function. We know that the current tool using stress ECG is not perfect, although accessible.
Ian wondered whether the research should come out of the medical fee. Bruce agreed the CV topic is a good idea; although CAA would need confirmation that the funding is definitely available. It was suggested that if the funding comes solely from the Medical fee, then the pilots should have a say regarding what is relevant to them.

NEW ISSUES

CAA UK PPL License Medical Requirements

Ian asked whether CAA would follow UK CAAs move PPL to ordinary DL9 Medical? John replied that there is no policy work being undertaken in the organisation to his knowledge.

Research and policy work would need to be done. UK PPL has been successful and the risk matrix here could be pretty good. Richard reflected that the Director has indicated it could be viable. Stephen added it would be a Class 1 P endorsement on DL9. Ian is pushing for it at international AOPA level, to accept this for PPL.

Microlight/RPLs do not apply to these (MEs not used, only GP and DL9) Stephen said we need to be careful.

Ebola *(see hand out by Dougal Watson)*

Dougal attended the CAPSCA seminar which looked at communicable diseases in aviation. There was an outbreak in 1976 with recent outbreaks via air. Ebola travels quickly due to aviation as a vector for spreading. Protocol is in place to contact the border ahead, responding to incoming aircraft in a number of ways. Controlling national borders were discussed and how porous borders exponentially increased cost. This is now an ICAO Audit issue. Tim advised that a pandemic exercise was undertaken by the beehive and MoH, which Air NZ had been party to. CAA highlighted that they had not been invited and would feed this back to MoH. There had been no new cases of Ebola for some time, therefore the status would be downgraded.

Tim outlined MERS (SARS II) is the current risk. The world is getting more mature in the first line response, at exit control. This is more in line with ICAO and WHO requirements, instead of protecting only incoming where people may have already been infected.

RESEARCH TOPIC

On hold until funding is confirmed for 2015/2016 Financial Year.

AVIATION MEDICINE TEAM UPDATES

Temporary Medical Conditions which do not require Reporting

CAA are reviewing the legal aspects and the least conditions are to be written first. We will then seek feedback from the ACMLG. It is important for CAA to have this in place.

GENERAL DIRECTIONS - MEDICAL MANUAL STATUS can be found on the CAA website

http://www.caa.govt.nz/medical/Medical_Manual.htm

Opthalmology being finalised
ENT consultation closed
Respiratory being finalised
Neurology draft being finalised
Cardiology chapter started – there is some ambiguity in the current documentation.
The group provided feedback for this Chapter:
Stephen indicated that half a dozen key issues need to be covered in Cardiology. Cardiovascular can be written and amended if a Cochrane report occurs. Ian asked whether an aviation medicine specialist as a cardiologist is needed. Claude said at the end of the day it is the medical examiner who accepts the decision. Bruce asked how many cardiologist opinions do you accept? Often we do agree, as occurs in everyday medical practice. Stephen identified vast numbers of CV incidents for aged pilots, who stop flying.

Mental Health or Urology could be future GDs

Tim offered that from an airline perspective, internationally, the last cardiovascular incapacitation was in 1971. If there was a chapter that needs to be written it is Mental Health (alcohol and drugs). Claude advised that CASA is working on that.

Colour Vision

GD has been extended to 1 July 2015. John asked the group to make submissions before this date. A review panel will be formed of about 4-5 people and consideration of who is on this is underway by Graeme Harris. The panel will consist of an operational pilot/GA, medical specialist in opthalmology/optometry, medical representative and CAA Chief Legal Counsel.
Bruce thinks it is a red herring. John Byers asked how many does it affect? It was difficult to assess the amount affecting pilots from the CAA system due to its paper based system. In the general population it is about 5-6%.
Is it worth pursuing? Dougal did not have an answer as the Director is running this consultation. The GD draft is a document that provides definition of the medical Standards to MEs, adding the City of London test to determine validity. Bruce asked whether there have been cases where colour vision was the cause of an incident. Dougal said it was open to debate. Samantha asked whether there were any examples of it being a contributory cause? The Tallahassee case used by NTSB brief here
The proposal was to add another arm to testing, it is not a change of policy.

Bruce asked that if colour vision is not a safety issue, why is in the assessment? It is a State requirement.
Stephen thought colour vision is complicated and the GD guidance would be good. An AMC can be used for those not meeting requirements.
Ian wondered if a practicality test such as flight testing could be used for someone not meeting requirements, to demonstrate their ability?
The City of London test has limited availability currently (Auckland). There are different standards around the world.

Phil estimated that there are 400 CVD pilots currently. In New Zealand, Jetstar operate CVD pilots under AOC. Job security is on the line due to validity of Ishihara. Issues are that the testing book fades. In an aircraft the lights grab attention, there is a huge body of evidence; night ops, NVG ops, enough evidence to say there is not an issue with colour vision. What do we as a community want? - Ben asked why have any restriction? Phil identified NZ as losing pilots who have a $100k student loan, and are unable to carry passengers, they will happily go to Australia. Phil requested a review and decision to be made. He felt that the evidence was substantial and history long, to support the Australian rules on colour vision.

Draft Revision of Examination Procedures – currently being worked on.
Medical Application form – revising draft for MEs to review and SMOs/PMO. The acceptance of visa/mastercard needs changing as advised by Finance. Not currently a high priority.
SMO Resource - Rajib Ghosh has moved from 0.6 to 0.4 FTE, the advertisement for a replacement has closed. BAU is a high priority. We have at present; 3 FTE Dougal, Claude 0.6, Tony 0.4,Rajib as above. John outlined the difficulty of attracting full time SMOs was challenging. The group is interested in the staffing of the Aviation Medicine Team.
Templates for Communication - Ben asked whether these are still being revised? Judi explained that resource was an issue and currently on hold while BAU had priority. Email, fax and posted copies are being received at Air NZ, Judi to follow up post meeting.

SUMMARY Our discussions today have been very interesting. Colour vision was explained well from a different perspective by Phil. DIC had been expressed by members, MEs and the public interest highlighted. Dougal shared his experiences from International Forums which exposed some issues we may not have thought of before.

Action Items

- Feedback to MoH on Pandemic Situational Awareness Preparedness Drill which CAA was not invited
- Confirmation of Research funding availability for the next financial year
- Colour vision submissions by 1 July 2015
- Lew to provide Dougal with results of Solo Operator Tower Risk Assessment.
- Update on Online system, funding review and medical application fee – Timeframes of some sort are required by the ACMLG (see below)

DATE FOR THE NEXT MEETING

6 October 2015

Actions Sheet

WHO	WHAT	WHEN	OTHER INFORMATION
CAA	**Update - Medical Fee and any possible Online Systems are reliant on the outcome of the Funding Review**: Further information? The Group sees these issues as high priority.	ongoing	The triennial Funding review is passing through phases. Phase 1 is completed, Phase 2 will be released, once approved by the Minister, with consultation to follow in August and September. Information and Summaries are available on the below links http://www.caa.govt.nz/funding/ http://www.caa.govt.nz/funding/funding_seminars_summary.pdf

The Germanwings Tragedy

The Germanwings tragedy, of 24 March 2015, resulted in widespread international media-speculation concerning the medical assessment of airline pilots. That speculation has variously explored medical certification processes, mental health problems and aircrew, medical practitioner reporting obligations (with regards to privacy), as well as specific information and conjecture concerning the medical circumstances of the co-pilot of the aircraft.

Resultant issues and difficulties include:

- Veracity and validity of commercial mass-media provided information. Consume with caution.
- Possible over-simplification of the mental health issues under consideration (depressive illness, suicide, murder suicide).
- Mental health matters can be a very sensitive topic when dealing with high-failure-cost activities such as piloting airlines. Knee-jerk responses, fuelled my incomplete information, has risk of pushing aircrew mental health issues back into the dark ages.
- ICAO discussions over recent years recognise growing importance of pilot mental health problems and have attempted to respond via SARPs.
- EASA working group established to specifically address the issues that come out of the tragedy. Indirect ICAO representation and involvement in this working group.
- FAA formation of a "Pilot Fitness Aviation Rulemaking Committee" to review their handling of aircrew mental health issues, and report back in 6-months.
- Preliminary BEA accident investigation report published in May, and titled "Preliminary report: Accident on 24 March 2015 at Prads-Haute-Bléone (Alpes-de-Haute-Provence, France) to the Airbus A320-211 registered D-AIPX operated by Germanwings."
  "Medical aspects: the investigation will seek to understand the current balance between medical confidentiality and flight safety. It will specifically aim to explain how and why pilots can be in a cockpit with the intention of causing the loss of the aircraft and its occupants, despite the existence of:
  - regulations setting mandatory medical criteria for flight crews, especially in the areas of psychiatry, psychology and behavioural problems;
  - recruitment policies, as well as the initial and recurrent training processes within airlines."

- NZ system fundamentally different to most of the world. S27C obligations over-ride privacy restraints and require problems to be reported to the CAA. Canada has similar reporting obligations to NZ s27C. The NZ statutory aviation medical safety regime is very robust when viewed in light of the Germanwings tragedy.

ICAO / WHO CAPSCA seminar re Ebola Virus Disease

Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA) Global Symposium, hosted by the International Civil Aviation Organization (ICAO) and the World Health Agency (WHO), at ICAO HQ Montreal, at the end of April 2015.
2003 SARS, 2005 H5N1 Influenza A 'Avian flu', 2009 H1N1 Influenza A 'swine flu', 2012 MERS, 2013 H7N9 Influenza A
Ebola Virus Disease, epidemic since 1976 with multiple outbreaks and recent international air transmission.
CAPSCA's general role is coordinating the international aviation response to public health risks, such as pandemics, and it is a key role for ICAO. CAPSCA's objectives include:
Public health protection - general public, air travellers and aviation personnel.
Assistance to States / Territories to establish national aviation pandemic preparedness plans, and:

- adherence to Article 14 of the Convention on International Civil Aviation;
- compliance with related ICAO SARPs (Annexes 6, 9, 11 and 14) and Procedures (PANS/ATM);
- compliance with WHO IHR (2005) regulations; and
- implementation of ICAO, WHO, ACI and IATA guidelines.

CAPSCA is currently under consideration for direct ICAO project funding, which will allow more extensive international education and outreach efforts. 'Donation' funding to-date.
Many issues discussed, including:

- Difficulties with traditional concept of a State when looking at areas with very porous borders
- It's been a problem since the mid-70s. Concerns that the wider world only seems to be responding when the problem has broken out and affecting them directly.
- Political expedients and responses in some countries (e.g. german political promise and dedicated evac aircraft being rapidly built).
- Concerns at differential funding availability … the money is not where the problem is
- The power, economy, and efficacy of Exit-control measures over Entry-control efforts much emphasized
- Review report concerning procedural handling of inbound airlines with suspected-infectious-disease case onboard discussed. Some direct implications for possible revision NZ government policy. Discussed with Air NZ and report passed on.

CAPSCA-related documents at www.capsca.org/CAPSCARefs.html