



Aerial Firefighting EUROPE 2015 **ZADAR | CROATIA** **29 – 30 April 2015**

Chairman's Report

Interoperability Workshop

The 2015 year for the European Aerial Firefighting conference held in Zadar was preceded by a one day Interoperability Workshop held under the auspices of the Global Fire Monitoring Center (GFMC), which functions as the Secretariat for the International Fire Aviation Working Group (IFAWG) and the Wildfire Preparedness Mechanism (IWPM). Prompted by an increasing awareness of the need to make best use of limited resources and a readiness of nations to conduct cross border and Out of Area firefighting operations, this proved a timely and constructive forum. The detailed outcomes are reported elsewhere (<http://www.ifawg.org/>) however, the Presentations are also available with those of the Conference itself. Key issues were briefed to the Conference delegates by Professor Dr Johann G Goldammer, the Director of the GFMC supported from the floor by Richard Alder, General Manager of the Australian National Aerial Firefighting Centre and Chair of the IFAWG.

The European Venue

The wisdom in bringing the event to Croatia, the latest member of the European Union, was borne out by the commitment of the National Protection and Rescue Directorate (DUZS) and the Croatian Air Force Aerial Firefighting Squadron together with the facilities for a comprehensive dynamic and static flying display. The General Director of DUZS, Dr Jadran Perinic gave the Keynote address, setting out Croatia's need for an effective AFF capability, coordinated with the Ministry of Defence through the AFF Squadron commanded by the hugely supportive Major Davor Turkovic, who relayed a message of welcome from the Minister of Defence. The squadron regularly responds to Wildland Fires in neighbouring Bosnia which lacks the resources to adequately protect its own infrastructure. This is viewed as constructive reconciliation after the 'Homeland' war in the early 1990s.

This cross border assistance chimed with the Workshop goals of mutual support through Out of Area deployments, the effectiveness of which depends upon the elements of Interoperability: ready diplomatic clearance; ease of communication; commonality of aircraft servicing facilities; detailed operating elements such as water access for scooping etc and safety ensured through joint procedures. The IFAWG is contributing to elements of this through nascent Fire Aviation Guidelines and an early draft of a Framework document. IFAWG however, is manned by appointed volunteers, and is now opening membership and seeking input from suitably experienced operators and organizations. (IFAWG Chairman Richard Alder <general.manager@nafc.org.au>)

AFF Europe 2015 Auspices



EU Civil Protection Mechanism

A particular detriment to Interoperability has been the absence of an appropriate tasking authority, resulting, for example, in Croatia responding to a request from Portugal when much closer assets might have been tasked.

The **Emergency Response Coordination Centre (ERCC)**, operating within the European Commission's Humanitarian Aid and Civil Protection department (ECHO), has since been set up to support a coordinated and quicker response to disasters both inside and outside Europe using resources from 31 countries participating in the Union Civil Protection Mechanism. The ERCC replaces and upgrades the functions of the previous Monitoring and Information Centre (MIC).

In a timely presentation generating the greatest volume of questions, Dimitrios Pagidas, DG of the ECHO Emergency Response Unit, speaking on the EU Civil Protection Mechanism, briefed on the Commission's Implementing Decision of 17 October 2014 which replaces ad-hoc responses with a planned approach. Heralding a culture of prevention and preparedness the ERCC will build upon predefined capabilities. Key to this will be the establishment of a European Response Capacity with the essential elements of: Interoperability; self-sufficiency; dispatch at very short notice; and finance for training and exercise. The new legislation will establish a European Emergency Response capacity consisting of a **voluntary pool** with **buffer capacities** to address temporary short comings in extraordinary disasters (co-financed to **40% of the Standby costs**) and with seed funding for **new response capacities** in very specific situations where a potentially significant gap has been identified. The voluntary pool will consist of **pre-committed response capacities** for EU missions with the assistance assured through **quality criteria** and a **certification process**. In return for this commitment, **Member States benefit from financial support** for adaption costs and transporting the capabilities. This promises to be a valuable advance in both the quality and availability of assets, and while the EU is not renowned for rapid response, several deployments have already been made using this process and preparations for the forthcoming Firefighting season include, the latest member of the European Union a meeting in May (Check slides for detail). This presentation merits detailed study and the active participation of those countries which already have a developed capability in AFF.

Presentations

As a legacy of the war, Bosnia is hampered by a complex arrangement of internal government together with the added complication to firefighting of land mines. Dr Samir Huseinbasic, Department Head in the Ministry of Security outlined various Bi-Lateral Agreements in addition to the support from Croatia.

Macedonia has relatively limited aviation (Department of Aviation Assets, DAA, established 2010) and as yet is still challenged by too many actors and a mutual lack of appreciation of the roles, capabilities and procedures of air and ground forces. Professor Dr Nikola Nikolov (Director of the Regional Southeast Europe/Caucasus Fire Monitoring Center, based in Skopje, Macedonia) will have gained inspiration from the Spanish Air Force's presentation on Communications Management.

Captain Chico Chamon, visiting with the Spanish CL 415, also highlighted the various roles and responsibilities, including the priority for ground crews safety.



Elsa Enriquez Alcalde, Head of the Spanish Forest Fire Service had already briefed on the more numerous helicopter assets under her control but utilized through the 17 autonomous regions.

In turn Victor Devouge of the French Ministry of Security gave a comprehensive briefing on French capability and AFF doctrine today, and the ambitious plans for a renewal of their fleet, buffer funding from the EU and the vision of a joint European AFF centre of training and excellence.

As befits an International Conference, there were global contributions with new initiatives. The experience of the Australian state of Victoria's 'Black Saturday' in 2009 still shapes AFF in that country and the Conference was briefed by Operations Officer Wayne Rigg on the Royal Commission recommendation to establish a system that enables the dispatch of aircraft to fires in high-risk areas without requiring a request from an Incident Controller or the State Duty Officer. The resultant Pre Determined Dispatch of aircraft (PDD) has shaved 22 minutes off response time.

An anticipated presentation from Russia by Andrey Eritsov, Deputy Chief at the Aerial Forest Fire Centre Avialesookhrana, was frustrated by an early start to the fire season requiring his attention. His report was delivered by co-author Johann Goldammer who took the opportunity to update on current fire activity in the vast extent of Siberia.

Malaysia has a significant jungle cover and is relatively well prepared for AFF. Fire Superintendent Faisal Izani is in the market for additional air assets which will excite the market! The country is however, constrained by a political decision to have a Malaysian Maritime Enforcement Arm (MMEA) with responsibilities which would seem to overlap other government forces as in particular they own the CL 415s which are then loaned for Aerial Firefighting!

From still further East was Takeshi Ito Head of a section in the Japan Aerospace Exploration Agency (JAXA) who had done advanced modelling on the dispersal of water droplets, and with computer aids to assist the pilots, has made a valuable step forward in the effective deployment of water in fire fighting.

The Romanian Air Force (presenter Captain Florin Ianculescu), operates the Medium Lift C27Js, the Spartan with a water drop capability through the Guardian CDS system. This simple and inexpensive arrangement requires no modification to the aircraft and can deliver 6 x 1050 litres in each pass.

A welcome returning presenter was Sawsan Boo Fakhreddine, the Director General, Association for Forests, Development and Conservation (AFDC), a Non for profit non-governmental organization which has specialized in forest and forest fire management in the Lebanon since 1992. Due to security problems in the country, both internal and border conflicts, aerial fire fighting is the responsibility of the Lebanese Army & Air Forces. Their challenges however, pale alongside those of the country in general and AFDC in particular with over 1.4 million refugees. The burden on fragile environmental resources is already immense, but forest and fire risks are heightened by uncontrolled access for wood and illegal fires. Her plea for support was heartfelt and should be heard by agencies from the UN, the EU and neighbours able to respond.



Sponsors and Exhibitors

Sponsors are the financial lifeblood of these events and hence are of immeasurable value. As with all the Exhibitors, they bring knowledge and expertise, providing both a backdrop and a stimulus to the Networking opportunities in the Exhibition Hall, where refreshment breaks also take place. The Sponsors have, in addition, the opportunity to make a presentation related to their field of expertise. For the principal sponsor DynCorp International this was on the US Next Generation Fire Fighting Airtankers presented by Wayne Coulson with whom they have a joint venture utilizing the latest technology in Next Gen Smart Tank Control Systems, (the Coulson RADS-XXL Technology). Mounted in a Coulson C130, this meets the USFS mandated requirement for existing military aircraft and is under contract for the coming fire season.

Silver Sponsor INAER, the Italian company, part of the Babcock International Group (Mission Critical Services), is the leading provider of aerial emergency services, including fire fighting. Former Major General Antonio Urbano, Deputy General Director, outlined the fleet of some 350 CL 415s operating throughout Australia, Cyprus, Finland, France, Ireland, Italy, Norway, Portugal, Spain, Sweden and the United Kingdom.

Silver Sponsor Hugo Arceo of Air Tractor presented the key factors to success in Fire Fighting with the hugely flexible and economical AT802 in both the land and scooping versions.

SAAB's Henrik Naslund, a non-aviator but an intuitive analyst of pilot requirements presented on Heads up Displays contributing to safe and efficient aviation with his strap line of HEAD UP, EYES OUT!

Conference Dinner and Display

DynCorp generously sponsored the Conference Dinner on the first evening contributing significantly to both Networking and bonding and presenting the perfect occasion for the now annual award of the Tangent Link conceived 'Walt Darran Award' for the finest contribution to Aerial Firefighting in the past year.

In a challenging shortlist of finalists, achievements were as varied as firefighting in war zones, selfless rescue of isolated ground firefighters, through leadership in procedural developments and technical developments.

Philippe Bodino, now serving in the French Ministry of the Interior, won through as the outstanding aerial firefighter of his generation. With the award made on alternate years in Europe and in North America (although not excluding any part of the world) nominations will doubtless grow with each event.

A highlight of any AFF Conference is always the Dynamic and Static displays and Croatia excelled. With CL 415s flown in from Spain, France and Italy and the full complement of Croatia's fixed and rotary wing on display with live water bombing and heli-rapelling, Major Turkovic had every right to be proud of both his own Squadron and his comprehensive planning.



Summary

Tangent Link prides itself on 'connecting business', achieved in some measure in this AFF Europe, with 200 delegates from 33 countries and with 30 Companies participating. It is apparent however, from analysis of these events, that there is a very broad range of interests to be satisfied: many nations are thirsting for knowledge on procedures and safe and effective action from a relatively low starting point; others with an eye on procurement are looking for the most cost effective products they can afford, hopefully providing a stimulus for Industry.

In addition however, this event has progressed in step with UN, EU and IFAWG initiatives, providing a shop window for Interoperability issues and the beneficial deployment of assets to combat the impacts of climate change, conflicts, and population growth (including refugees) in a world of limited resources.

We hope to see you continuing with this bold endeavour in North America in 2016 and back in Europe in 2017.

As always, any errors of fact or interpretation are mine alone and for which I apologise.

Terry Loughran
Conference Chairman
Rear Admiral CB FRAS

11 May 2015

6th International Wildland Fire Conference

Statement of the International Fire Aviation Working Group (IFAWG) – An Input Paper to the Conference Statement

12 October 2015

Introduction

The effect of changing fire regimes, socio-economic developments, land-use changes, and climate change as drivers for improvement in fire and emergency management practices are well documented. Apparent and anticipated future changes to wildland fire regimes and wildfire risk at global level, along with the observed increasing vulnerability of ecosystems and society to wildfires, requires appropriate fire and land management solutions to reduce wildfire risk and impacts. In turn, there is a need to ensure that appropriate preparedness and response capacity exists domestically and at the global scale. Accordingly, there is a need for transboundary cooperation and for wildfire management agencies to share information and resources. This need is particularly compelling in the case of highly specialised capabilities such as fire aviation. The activities of groups such as the Wildland Fire Advisory Group (WFAG), the Global Wildland Fire Network (GWFN) and the UNECE / FAO Team of Specialists on Forest Fire confirm that global society is already willing to share expertise and resources in fire management, but that international cooperation needs to be streamlined and thus strengthened. This includes more systematic and formalised cooperation protocols.

The use of aerial means in fire and emergency management has expanded rapidly in recent decades. Aircraft now provide valuable support to fire management activities around the world. Many states make very effective use of aircraft in a wide range of roles. However there is evidence to suggest that these specialised, versatile and relatively costly resources could be utilised more effectively in many circumstances. There will be increased pressure to ensure that the use of aviation resources is safe and as efficient and effective as possible, particularly as the demand for aerial support grows with the anticipated changes in fire regimes, the increased wildland fire risk across the globe, and the increased expectations of communities regarding effective response.

Sharing of aviation resources between jurisdictions offers potential to generate considerable economic benefit and to improve the effectiveness and efficiency of fire prevention and response. There are current examples of highly effective protocols for cross-border sharing of fire aviation resources. In the past there have been many instances of effective international collaboration in fire aviation to support response to wildfire emergencies and wildfire disasters. However, it is also reasonable to say that there have been examples of ineffective and inappropriate sharing of aviation resources.

Cross-border sharing of aircraft is likely to be an increasing feature of wildland fire management. There are opportunities to significantly enhance resource sharing and to improve outcomes by establishing common operating procedures and standards and by embedding robust resource exchange procedures into pre-planned inter-jurisdictional agreements.

The International Fire Aviation Working Group (IFAWG) comprises an international group of aerial fire management specialists who lead and manage the use of aircraft for wildland fire management around the world. The genesis of the IFAWG harks back to the 4th International Wildland Fire Conference, hosted by Spain in 2007. During that conference a thematic Aviation Management workshop was held with the aim of identifying opportunities for multilateral cooperation to improve the safety, effectiveness and efficiency of aerial firefighting. The recommendations expressed a need to:

- continue to identify opportunities for sharing of information and resources;
- establish frameworks to properly evaluate the net benefit (including accounting for benefits of prevention of losses) of applying of aerial means;
- ensure that aerial operations are managed, supervised and supported to a high standard, and are properly integrated with other aspects of fire operations;
- establish a formal network to facilitate the continued sharing of information, with a priority on safety-related information;
- standardise approaches to integrated management of aerial means.

The IFAWG is made up of representatives from countries and jurisdictions who regularly utilize aerial means in managing landscape fire, including for firefighting. The IFAWG operates as a Working Group of the Wildland Fire Advisory Group (WFAG) of the United Nations International Strategy for Disaster Reduction (UNISDR). The group aims to improve the safety and effectiveness of aerial means by sharing information, experience and resources. IFAWG joined the preparation, organization and follow-up of the *UNECE/FAO Regional Forum on Cross-boundary Fire Management* (United Nations, Geneva, 2013) and contributed with the international consent-based, voluntary Fire Aviation Guidelines.

The Fire Aviation Guidelines are intended to assist communities across the globe to manage fire and to build resilience to the effects of wildfire by improving the effectiveness of a specialised support capability – fire aviation. The guidelines aim primarily to:

- Assist adopting states to develop and manage appropriate, effective, high-quality aviation capabilities by providing guidance in regard to recommended minimum standards and appropriate best-practices.
- Enhance the opportunities for transboundary cooperation through the sharing of aviation capabilities between states or jurisdictions by (a) developing common standards and common operating practices for fire aviation that will enhance inter-operability; and (b) providing recommended procedures and supporting information for effective sharing of fire aviation resources.

Part I of the Guidelines constitute the Framework Document, which has been subject to international discussion and inputs since 2014. Part II of the Guidelines provides the International Manual of Common Rules for Fire Aviation, which are now available for screening and comments.

Recommendations

Members of IFAWG encourage the participants of the conference to include the following recommendations in the Conference Statement:

The conference acknowledges the valuable supporting role played by aerial means in fire and forest management. The conference also acknowledges and supports the benefits of sharing aircraft and support resources between jurisdictions. The conference recommends:

- Agencies and groups continue to develop methodologies to ensure that aerial means are safely applied as part of an integrated approach to fire and forest management, and are deployed according to assessed risk and sound economic principles;
- Agencies continue to develop bi-lateral and multi-lateral agreements, where appropriate, that set out pre-planned arrangements and operating practices to facilitate safe and effective sharing of aerial means between jurisdictions;
- Agencies and groups work together to continue to support and develop the voluntary Fire Aviation Guidelines in order to promote best management practices and in order to support safe and effective sharing of aviation resources between jurisdictions;
- The conference supports the adoption of the Fire Aviation Guidelines for independent endorsement and application by individual operators and agencies, or within the framework of bi-lateral and multi-lateral agreements;
- The conference suggests that any wider agreements or initiatives on international cooperation reference or incorporate and promote the Fire Aviation Guidelines where appropriate.