

Meeting Minutes International Federation of Helicopter Associations (IFHA) Annual Luncheon and ICAO Update Tuesday, 28 January 2020 at Heli-Expo 2020 Anaheim Convention Center, Anaheim, California, USA

1200 Noon A meeting of the IFHA Affiliates was held at the Anaheim Convention Center and called to order by the IFHA-nominated representative to the International Civil Aviation Organization (ICAO), Matt Callan. The following is an alphabetical list of IFHA Affiliates:

- Asociacion Chilenade Helicopteros (ACHHEL)
- Association for Promotion of Helicopter Industry Japan (AHIJ)
- Australian Helicopter Industry Association (AHIA)
- Brazilian Helicopter Pilots Association (ABRAPHE)
- British Helicopter Association (BHA)
- Commercial Aviation Association of Southern Africa (HASA)
- European Helicopter Association (EHA)
- Helicopter Association International (HAI)
- Helicopter Association of Canada (HAC)
- New Zealand Helicopter Association (NZHA)
- Rotary Wing Society of India (RWSI)

Emergency evacuation procedures were covered, and the HAI Anti-Trust Statement was reviewed.

The gathering was opened by welcoming members and guests and taking roll call of IFHA Affiliate Presidents, CEOs, Chairs and their representatives. A total of eight IFHA Affiliates were represented at the meeting, and listed as follows:

- Ms. Loreto Moraga, Chair ACHHEL
- Mr. Yoshi Arakawa, President AHIJ
- Mr. Paul Tyrrell, CEO AHIA
- Mr. Peter Moeler, Chair EHA
- Ms. Elisabetta Dalla Benetta, Executive Director EHA
- Mr. Ed DiCampli, COO HAI
- Mr. Fred Jones, President HAC
- Mr. Scott McKenzie, Chair NZHA
- Mr. R.N. Johri, CEO Aman Aviation; representing AVM K. Sridharan, President RWSI

The following IFHA Affiliates were unable to attend, but sent their regards:

- Mr. Thales Pereira, President ABRAPHE
- Mr. Tim Fauchon, CEO BHA
- Mr. Tinus Van Jaarsveld, President HASA

Also, in attendance were the following representatives:

- Ms. Jan Becker, Chair, HAI Board of Directors
- Mr. Myles Tompkins, AHIA
- Mr. R.N. Johri, attending with Mr. Aman Johri
- Mr. Andy Pierce, FAA
- Mr. Nolan Crawford, FAA
- Mr. Cade Clark, HAI Government Affairs

An ICAO update was provided on actions during the previous year (see Attachment A, *IFHA Luncheon and ICAO Update*)

Ed DiCampli, COO HAI, began the meeting by highlighting HAI's commitment to safety, and initiated an IFHA Affiliate open-floor discussion that followed the meeting agenda (see **Attachment B**). Discussion was focused on IFHA Affiliate safety and regulatory issues and concerns, and their impact on the current state of the helicopter industry (**Attachment C** provides a list of IFHA Affiliate concerns).

The IFHA Affiliates discussed various possibilities for future meetings, to include:

- Extend the time period for annual IFHA meetings at Heli-Expo (perhaps 3-4 hours) so that every affiliate will have an equal amount of time to present their issues and concerns;
- Hold meeting(s) during the year (in-person or via teleconference) in addition to the annual forum held at Heli-Expo.

The next IFHA Affiliate meeting is scheduled to occur in March 2021, during Heli-Expo in New Orleans, Louisiana, USA. Exact date and time at TBD.

The Meeting was adjourned at 2:00 PM

Attachments:

A: IFHA Luncheon and ICAO Update_Jan2020B: IFHA Luncheon AgendaC: IFHA Affiliate List of Concerns – 2020

Attachment A

IFHA Luncheon and ICAO Update_Jan2020 (attached to email)



International Federation of Helicopter Associations (IFHA) Annual Luncheon and ICAO Update - Agenda HELI-EXPO 2020 – Anaheim, CA 28 January 2020, Noon to 2:00 PM in Room 213C

- Introduce Ed DiCampli, HAI COO
- Present 11 IFHA affiliates

 CEO/President/Chair/Representative Introductions
- Discuss IFHA mission and goals
- Explain IFHA participation on ICAO Panels and Work Groups
 - Three Primary Areas of Activity in ICAO
- Provide IFHA affiliates with an opportunity to update the group on current events/issues:
 - Propose bi-annual IFHA executive meetings
 - o Recruit IFHA advisor representation on working groups
 - Define IFHA affiliate responsibilities
 - Fly Neighborly
 - Land and Live
- Timeline:

28 January 2020 from noon to 2:00 PM in Room 213C, Anaheim Convention Center

Attachment C

IFHA Affiliate List of Concerns – 2020

Note: The issues, concerns and viewpoints offered in this document are those of the particular Affiliate, and not necessarily those of the IFHA. These issues and concerns are published in this format as a means of encouraging communication, information sharing and possible collaboration among IFHA Affiliates; in hopes of improving safety, reducing risk and refining regulations in and among the international helicopter industry.

The following issues and concerns were relayed from IFHA Affiliates following the IFHA Luncheon held during Heli-Expo 2020:

Asociacion Chilena de Helicopteros (ACHHEL)1:

1. The local aviation authority [in Chili] is not available to develop collaborative work with private associations, neither to work on regulations improvements nor to set up a Helicopter Safety Team (HST). In Chile, the ACHHEL CEO is presently working on this issue with the International Helicopter Safety Foundation (IHSF).

2. When discussing public policies with local and regional authorities it is important to have statistics and a good source of international regulations. [ACHHEL suggests that] HAI could become the best reference and source of independent studies. That would be a very valuable support.

3. ICAO Annex 6, part III does not regulate helicopter aerial work, since this is not seen as international operations. When ICAO [Annex 6] is not referenced, local authorities sometimes perplexed and look for the FAA or EASA rulings. Again, [it would be helpful if] HAI should become a reference in aerial work regulations and studies.

4. Due to climate change and other phenomenon, [dealing with natural] disasters are becoming increasingly complex. These are often no longer national, but regional problems. In Latin America, there are an abundance of "protectionist2" regulations that limit the options available to internationally combat and support disasters. These also limit the options for aerial work, in general.

¹ As described by Loreto Moraga, Chair ACHHEL

² Ibid

Association for Promotion of Helicopter Industry, Japan (AHIJ)3:

1. There is a need for IFR/point-in-space approaches. This issue needs to be addressed and resolved in order to improve safe flight availability in Japan.

2. Rooftop helipads are not available for use. Japan prohibits the use of rooftop helipads except for emergency purposes.

3. Limited access to airports. Helicopters cannot land and takeoff in Japan airports, so there is no smooth transfer between airline/business jet and helicopters at airports.

4. Off-site airfields (heliports). In Japan, it is difficult to gain approval, establish, build and maintain off-site heliports. If Japan Civil Aviation Bureau (JCAB) receives complaints from a neighborhood, the field cannot be used, even after obtaining approval from JCAB.

5. Lack of helicopter pilots (perhaps the same for mechanics). There is a need in Japan to promote the career benefits of being a helicopter pilot, highlighting the attractiveness in terms of social contribution (i.e., saving lives, etc.) and career (i.e., alluring work, good salary conditions, etc.).

6. Hoist operations for commercial purpose (human external cargo (HEC)). There are two potential methods of developing the usage of helicopters in Japan: offshore windfarm, and harbor pilotage. To make this happen, JCAB must accept such operations by defining safety standards based on EASA and FAA.

7. Difficulty in establishing helicopter pilot flight hour experience. In the past, young pilots were able to accumulate flight hours by operating single-engine helicopters on crop spraying jobs, or similar missions. A pilot could rapidly build hours and eventually develop flight skills and hours required from that mission. Today, the crop spraying mission is mostly conducted by drones, as a replacement means of the helicopter. Thus, Japanese helicopter operators are now struggling with how to produce and develop young pilots, and also increase their flight hour experience.

Australian Helicopter Industry Association (AHIA)

HAI's Chair, Board of Directors, Jan Becker; HAI's new President and CEO, Jim Viola; and HAI's COO, Ed DiCampli are attending the HAI Board of Director's Meeting in Australia in March 2020. While in Australia, Jan and Jim also plan to attend a meeting with AHIA executives in Queensland. This will provide AHIA with a good opportunity to relay and discuss high-priority safety and regulatory issues presently being faced by the Australian helicopter industry.

³ As described by Mr. Yoshi Arakawa, President AHIJ

European Helicopter Association (EHA)

1. Difficulties have been experienced gathering sufficient exposure data needed to draft adequate rules for improving safety and supporting a sustainable VTOL industry;

2. EHA members have concerns regarding the safe introduction of UAVs into the same airspace being used by manned aircraft;

3. There is a need to develop measures to fight the shortage of engineers, mechanics and pilots in Europe;

4. Identify rules and provisions that impose administrative and financial burdens impacting small helicopter operators;

5. Ensure that the interests of the European helicopter industry are granted in the Single European Sky ATM Research (SESAR) Joint Undertaking

6. The EHA is presently engaged in the following activities in Europe:

- Contribute to further developing the workstreams of the Rotorcraft Safety Roadmap;
- Actively participate in drafting the vertical takeoff and landing (VTOL) regulatory framework; and,
- Develop *EUROPEAN ROTORS, The VTOL Show and Safety Conference*, organized in collaboration with the European Aviation Safety Agency (EASA).

Rotary Wing Society of India (RWSI)4:

Single-engine helicopter operations and acceptability

1. Aviation business is capital intensive. The commercial viability of many charter operators depends on low cost of acquisition and low direct operating costs of helicopters. Single-engine helicopters are therefore preferred by most of the entry-level operators. ICAO SARPs in Annex 6 restrict the use of single-engine helicopters to daytime flights "over the plains, and only in good weather.5" This inhibits the growth of the industry, especially a fledgling one like in India. This initiative is aimed at making single-engine helicopters more acceptable with increased reliability of turbine engines. *Applicability ICAO Annex 6, Part III*

2. ICAO Annex 6, Part III is applicable to "International Commercial Air Transport Operations" and as such should not be adopted in India for domestic general aviation. The USA, where more than half of the world's helicopters operate, has not adopted these rules in the present form.

Performance classification and applicability in the Himalayas

3. ICAO has categorized helicopters into performance classes based on the number of engines and engine performance. Whereas Performance Class (PC) 1 helicopters can operate with a guarantee of safe continued flight or safe landing should one of the engines fail, PC2 and PC3 helicopters have been estimated solely based on the number of engines. There are many critical components in a helicopter and the engine is only of them. Adept risk management dictates that reliability of the helicopter, as a whole, should be considered when calculating risk. Technological improvements over the decades have put the reliability of turbine engines at par with other critical components and this point needs to be considered. Laying undue importance on the number of engines is not warranted because it will have an adverse effect on the industry's freedom to use helicopters effectively. The lowering of annual fleet utilization with no reduction in the number of accidents will, in fact, amount to an increase in the accident rate. In India, there are large inaccessible areas at medium to high altitudes where no helicopter can demonstrate PC1, or even PC2 ability. Most of the known helicopters in India are Cat "A," certified up to 8,000 feet density altitude (i.e., between 5,000 to 6,000 feet pressure altitude under Indian conditions). Above a certain altitude all helicopters are in PC3 category. So, if the ICAO SARPs are adopted by India's Ministry of Civil Aviation, helicopter operations in J&K, Himachal Pradesh, UP hills, north Bengal, Sikkim, Arunachal Pradesh, Parts of Nagaland, Mizoram and Meghalaya will not be permissible (helipads with density attitude 6000ft and above).

Risk factors

4. Provisions of ICAO Annex 6, Part III also aim to prevent performance Class 3 helicopter from flying at night. There have been only 0.5 accidents per 100,000 flight hours on single turbine helicopters, whereas twin turbine helicopter accident rate was twice that figure. The RWAI feels that single-engine, piston helicopters have a comparatively higher accident rate and perhaps should not be allowed to operate by night.

Encourage the training of helicopter pilots

5. Fallout from restrictions on night flying by single-engine helicopters will impact training flights, and hence impact long-term availability of trained manpower. So far in India, the civil helicopter industry has been fortunate in obtaining highly experienced former Defense pilots to fill their cockpit vacancies. India's helicopter fleet has nearly doubled in the last five years and the trickle of ex-military pilots

⁴ As described by AVM K. Sridharan, President RWSI

⁵ Ibid

coming out of the Defense forces is inadequate to meet the growing demand. Since the commercial helicopter pilot's license (CHPL) syllabus requires 10 hours of pilot-in-command (PIC) night flying, a student would require a fair amount of twin-engine flying to earn a CHPL. With the cost of operation of a twin-engine helicopter at about Rs. 55,000/- per hour as against Rs. 14,000/- for a single-engine piston helicopter6, the total cost of training for CHPL will be prohibitive. This will indirectly inhibit the growth of the industry with no apparent improvement in safety as shown in the safety statistics.

IFR operations on a 24-hour basis

6. Nearly half of the helicopter fleet in India consists of VFR machines. As of now, due to the nonavailability of night landing facilities in most of the areas where helicopters operate, the utilization of the commercial fleet is restricted to daylight hours only. This brings down the monthly utilization rate, and hence the cost of overhead per flight hour. ICAO Annex 6, Part III restricts single engine helicopters from flying under IMC. One can only imagine the plight of charter operators who have to wait for hours for the visibility to improve before they can be cleared for takeoff. RWAI proposes that, like in the US, Special VFR clearance criteria for helicopters be implemented considering the ability of helicopters to slow down to any desired speed in order to avoid getting dangerously close to other traffic and to terrain. Industry should be free to work the IFR-capable turbine engine helicopters three shifts a day by removing night flying restrictions.

IFR capability

7. It is noteworthy that in the accident statistics of single versus twin engine helicopters, most of the single engine helicopters happen to be VFR-equipped as opposed to most of the twins which were IFR-equipped. A study brings out the fact that accidents under VFR are several times higher than those while flown under IFR. The [US] FAA is encouraging single engine helicopter owners and operators to equip their machines with IFR equipment. Arguments in favor of IFR operations include: (a) An IFR helicopter is better equipped with instruments and communication equipment;

(b) An IFR pilot is better trained; and,

(c) The IFR flying environment is better controlled with better surveillance facilities.

India is one of the first countries in the world to have radar coverage in all the major air routes, so RWAI asks the question: Why deny their advanced facilities to single engine helicopters?

IFR fuel reserves

8. A final point on IFR operations, with improved navigational and communication equipment, why are we continuing with the antiquated IFR fuel reserve requirements? Helicopters, due to their short range, often operate within a single "weather system" and there is very little possibility of encountering unexpected adverse weather at the destination. How does one justify a two-hour fuel reserve should an alternate airfield not be available – much like in extended offshore operation. What about the ability of a helicopter to land in a small clearing? This issue certainly calls for more research and deliberations between rule makers and industry. A rule for a more practical and equally safe IFR fuel requirement can certainly be found.

City center heliports and heli routes – Current requirements

9. Let us study the case of single-engine helicopters to elevated heliports/helidecks. Helicopter Association International of USA made an analysis of the risk of an engine failure during take-off or landing to elevated helidecks/ports to evaluate the potential of a deck edge strike during this maneuver. Using an accepted exposure target of 5 x 10-8 of this event occurring, it was found that one could operate up to 20+ seconds in the so-called "risk zone" and not exceed this target exposure limit. This is

⁶ Converting Indian Rupee to US dollars, this is equivalent to approximately \$196 per flight hour

extremely close to the number used by the FAA [and ICAO] for evaluating risk during Extended Diversion Time Operations for a large twin-engine transport, such as the Boeing 767 or 777. The possibility of failure of the second engine, during diversion on one engine over water was comparable to the risk involved in helideck operations. Another study based on available accident data arrived at an interesting finding. Assuming current accident rates, if there were five departures and arrivals at a heliport every day, the likelihood of an accident occurring was one in every 475 years. The FAA, having studied such research data, have allowed single engine helicopters to operate without restrictions to elevated heliports. The famous heliport at Dallas Convention Centre is an example. We agree on the desirability of having PC1 helicopters operate to city center elevated heliports. But when the risk factor of single engine turbine helicopter operation is not higher than the twin-engine machines, why restrict the singles?

ICAO Annex 6 Part III and Annex 14 (Heliports)

Future development

10. [RWSI] now looks forward to adoption of rules and regulations related to heli routes in India. We do hope that following the deliberations during this seminar, helicopter operators will find new usages for helicopters like EMS, powerline construction and inspection, and airborne law enforcement. To enable orderly traffic of helicopters with due separation from fixed-wing air routes, it is desirable to lay down heli routes and publish charts and procedures for navigating between destination cities. In several western countries, helicopters fly unhindered within the cities and there is no reason why we should not be able to do so. Intercity flights between Mumbai and Pune, Chennai and Bangalore, Ahmedabad and Baroda, etc. are just waiting for the right ambience to make it happen. Same is the case with satellite cities like NOIDA, Gurgaon and Faridabad that deserve commercial heliports for shuttle helicopter flights to Delhi. Two years from now the tilt rotor will change medium-range air transportation, and we need to gear up to derive maximum benefit from this latest form of vertical lift technology.

Lowering the VFR visibility from 5kms to 3 kms in India

11. Considering the tropical/equatorial type of weather, coupled with the Himalayas in the Indian subcontinent, we need to redefine visibility limits for flying VFR in India. Due to smog in winter months and general high pollution levels during other months, visibility in big metros is usually less than 3000 meters. Therefore, we have the special VFR facility wherein helicopters can be permitted to fly when the visibility is less than 5 kms. However, the local authorities in certain metros, more specifically in Mumbai region, do not permit helicopters to take off for either maintenance flights or training flights under special VFR. We need to lower the VFR vis to 3 kms so that regular helicopter flying can be carried out routinely.