CRD - Annex 2

General

Paragraph

Cmt. ***1597 / DGAC***

Comment

L'application au travail aérien et aux aéronefs lourds d'exigences identiques à celles du transport public doit faire l'objet d'une attention particulière.

Reason

Si la note explicative permet de comprendre les raisons ayant amenées à préparer des exigences supplémentaires pour les activités commerciales et les aéronefs lourds, elle ne justifie pas en revanche pourquoi les exigences devraient être identiques pour une activité de transport public de passagers, un transport privé sur aéronef lourd et une activité d'épandage agricole. De plus, il est difficile d'évaluer l'adéquation de ces exigences aux aéronefs lourds en l'absence d'une définition de ces aéronefs.
Il faut par ailleurs noter que l'application de certaines de ces dispositions (L.M.E., manuel d'exploitation, passagers indisciplinés programme de sûreté) même si elles peuvent se comprendre n'en constitue pas moins des nouveautés substantielles pour les aéronefs lourds exploités en privé ou pour les exploitants en travail aérien.
Enfin l'application de ces exigences aux aéronefs lourds semble sous-entendre l'existence d'une structure d'exploitant et non une simple mise en œuvre par un pilote propriétaire. Cette exigence devrait apparaître clairement.

Response

The different definitions and the administrative means to achieve the technical requirements of chapter 8 will be developed in the Basic Regulation and adapted to the different types of operation.

Text not changed.

Paragraph

Cmt. ***68 / CAA Belgium***

Comment

Comment/Question for the EU linguist-lawyers

Is the usage of the word "must" normal practice in EU regulation in English language?

It is not an acceptable practice in Belgian regulation (FR+ NL).

Reason

Circulaire de légistique formelle du Conseil d'Etat (belge)

Response

This is the request of the European Commission legal service.

Text not changed.

Cmt. ***157 / RSA***

Comment

Annex 2 – Essential Requirements for Operations

COMMENT:
The proposal is to exclude aircraft identified in Annex 2 (amateur built and vintage aircraft) of ER 1592/2002 from the application of Essential Requirements for Operations

Reason

Amateur built and vintage aircraft are not subject to Type certification and in most of the case does not have a flight manual or an operation manual and are not maintained by an approved maintenance facilities.
Documents used to operate and to maintain those aircraft depend of the requirements implemented by National Aviation Authorities of the Member States.
If the Essential Requirements are applied to that Category of aircraft , exemptions will have to be clearly identified and accepted for a number of paragraphs. So , we suggest to consider Amateur Built and Vintage Aircraft as identified in Annex 2 of ER 1592.2002 excluded from the ER applicability as for Airworthiness and Maintenance Requirements.

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. ***166 / Eurocopter***

Comment

Annex 2
There are paragraphs through the annex 2 followed by a list of bulleted items. In order to make a better reference to these bulleted items, it is proposed that these bullets be replaced by numbers.

Reason

Response

Numbering such items could indicate an order of priority which is not intended.

Text not changed.

Cmt. ***258 / IBAC***

Comment

• As discussed in the business aviation community comments on the NPA Annex 1, it would appear that there is more detail than necessary and requirements are also more prescriptive than necessary to be considered as safety objectives. It is recommended that the Essential Requirements be considerably reduced and transformed into clear safety objectives.
• For example, Chapter 8. Operation for commercial purposes and operation of large aircraft contains many detailed provisions, such as the MEL requirements, that appear more to be more prescriptive than would be expected for safety objectives.
• The way that this chapter is written would indicate that all aircraft over 5,700 kg will be regulated in the same manner as commercial aircraft. This would not appear to be what EASA intended to achieve.

Reason

Response

In order to ensure legal certainty, Essential Requirements have to provide an adequate level of detail containing basic means of compliance necessary for the adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text changed but not as proposed.

Cmt. ***451 / BAUA***

Comment

• As discussed in the business aviation community comments on the NPA Annex 1, it would appear that there is more detail than necessary and requirements are also more prescriptive than necessary to be considered as safety objectives. It is recommended that the Essential Requirements be considerably reduced and transformed into clear safety objectives.
• For example, Chapter 8. Operation for commercial purposes and operation of large aircraft contains many detailed provisions, such as the MEL requirements, that appear more to be more prescriptive than would be expected for safety objectives.
• The way that this chapter is written would indicate that all aircraft over 5,700 kg will be regulated in the same manner as commercial aircraft. This would not appear to be what EASA intended to achieve.

Reason

Included in comment

Response

In order to ensure legal certainty, Essential Requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text changed but not as proposed.

Cmt. ***487 / ERA***

Comment

ERA recommends that:
• as a priority, the Agency engages with all stakeholders to focus its full attention on the development of practical, flexible and accurate Essential Requirements for Operations. This may naturally require a delay in any currently perceived timetable for approval and publishing
• invitations to participate in the review process associated with this draft document are targeted at those parties with the greatest interest, those who have shown the most concern through the consultation process, and other experts as deemed necessary to complete this task satisfactorily
• consideration be given to holding several such review meetings
• the Agency provides supporting safety and/or business cases where ERs have a direct affect on the manner in which airlines conduct their operations, and
• following this review process the Agency, in conjunction with the industry, develops a clear plan of action of how it intends to proceed with these issues, including a second round of public consultation.

Reason

The Essential Requirements for operations, in themselves, are not practical documents, but we accept that the legal make-up of the Agency and its relationship with the EC demand that the Basic Regulation contains such high-level rules. It is therefore most important that these ERs are accurately and comprehensively constructed, with the aim of satisfying both the politicians and lawyers, yet, at the same time, creating a flexible and practical framework within which the Agency and all stakeholders can operate. In our opinion the draft ERs presented with this NPA are neither accurate nor comprehensive, and are not necessarily practical.

From speaking with colleagues in the industry and from our own scrutiny of the ERs it is apparent that the draft document proposed with this NPA is not sufficiently mature, and has not been through a rigorous enough development procedure. This statement is based on experience gained from working with the JAA NPA process, and associated regulation drafting processes. Adequate time and resource must be allocated to this most crucial task – an ill-constructed regulation today will be with us for many years, and may impact on aviation safety.

Response

Comment noted.

Cmt. ***507 / M. Lake***

Comment

General Comment: Whilst having an overall applicability to UAV operations some of the particular requirements, like availability of Oxygen and others specific to crew/passenger carriage, will need to be refined.

Reason

Considerable work has recently been undertaken by the JAA/Eurocontrol Task Force to look at UAV regulation and operations; this work should be used as the basis for future EASA study.

Response

Comment noted.

Text changed.

Cmt. ***512 / IFALDA***

Comment

It is imperative that Europe address the critical vulnerability in its aviation system regarding operational control/flight dispatch. There have been a series of accidents/incidents in Europe related to the lack of effective operational control/flight dispatch systems. Several flights have run out of fuel and crashed, others have had fuel emergencies and others have run into severe weather/hail, with extensive damage to the aircraft. These could have been prevented by an effective operational control/flight dispatch system, but at present in Europe there is a chaotic patchwork of ineffective systems that do not even meet the weak ICAO standards. JAR-OPS is the weakest of all, with no support for operational control/flight dispatch. Most European carriers do not provide proper planning or briefing of flight crews, do not know where their flights are while they are enroute, and do not track them or provide safety information to them. They are more vulnerable to security threats and leave Europe behind in advanced technology regarding operational control/flight dispatch. European passengers deserve the best standard of safety in operational control/flight dispatch, not the worst, which is what they have at present.

See attachment:

Attachment: IFALDA General Comments to Essential Requirements for Air Operations

Comments by IFALDA, the International Federation of Airline Dispatcher Associations.

About IFALDA

IFALDA is a non-profit global professional organization, in existence for more than 40 years, which seeks to enhance professional standards and safety for the airline operational control/flight dispatch function. This is a unique function, which works closely with the flight crews and other functions, such as air traffic control, to make sure that airline operations are safe. The operational control/flight dispatch function deals with two primary tasks, that of pre-flight planning and briefing of the fligh crews, as well as the in-flight monitoring of flights once they have departed until they reach their destination. These are critical safety tasks and in some ways, are the “heart” of the operation of any airline.

The function of operational control/flight dispatch is recognized in both ICAO Annexes I and VI.

IFALDA membership at present consists of some 47 member associations in some 24 countries, in addition to a number of individual memberships from 7 other countries. Total members are some 1777. Included in this are a number of member associations in Europe. These include EUFALDA (The European Federation of Airline Dispatcher’s Associations), as well as associations in Austria, Belgium, Denmark, Finland, Germany, Greece, Iceland, Italy, Ireland, Luxembourg, Norway, Poland, Portugal, Switzerland, and Sweden.

IFALDA Comment.
The Situation regarding Operational Control/Flight Dispatch in Europe.

In the last few years there have been a number of serious accidents/incidents by European air carriers. These have ranged from fuel exhaustion accidents, or fuel emergencies, to aircraft running into severe weather and being significantly damaged.

Even while these serious accidents and incidents have happened, many countries in the European Community have no operational control/flight dispatch requirements whatsoever. No personnel training, no flight dispatcher certification, no communication system and no regulatory responsibility or authority to prevent incidents/accidents. Others have some training requirements. Still others have a certificate but no communications system. And others only provide limited support for “long haul” flights, yet others provide none at all. But none have an effective system that could prevent accidents/incidents.

Some of these accidents/incidents resulted because of the lack of timely, accurate safety information to the crew. Others happened due to the poor judgment of the crew when they continued into a situation, which was unwise on its face, in some cases under economic pressure to complete the operation. In all cases, the air carriers involved did not have an effective operational control/flight dispatch system to provide them with the proper support.

This is a serious deficiency which has had some serious consequences. It is a critical concern of IFALDA that Europe at present does not have an effective operational control/flight dispatch system for air carriers. In fact, it is usual in Europe for air carriers to have neither an effective pre-flight briefing system nor a communication system/flight watch system for their flights. We believe that this is simply unacceptable and is unsafe.

Flights by European carriers are generally planned and filed by computers on what is simply the most efficient route, cruise speed and altitude, for the lowest possible fuel burn, without considering severe/poor weather, NOTAMS, facility problems, ATC issues-restrictions, navaid problems, aircraft performance/system problems/MELs or other operational requirements. They do generally specify alternate airports, but often do not look at whether those airports will actually be legal regarding weather when the flight has to divert there. Flight crews are also often pressed for time and are under pressure and can often miss critical items.

In addition, when flights are enroute, many European air carriers simply do not know where their flights are at any given time, as no one at the air carrier is assigned to track them, and even if they did, could not communicate with them. It is a tribute to the flight crews that more problems do not occur, but even so, they are often left out to hang, all by themselves, with no support from the air carrier. It is not only not the safest system but it is not any system at all.

An effective operation control/flight dispatch system should have, at the minimum, a communication system, qualified, certified personnel/flight dispatchers to operate the system, the proper informational tools for the flight dispatchers and the regulatory authority and responsibility to make the system work properly. This would provide a proper safe preflight briefing and flight monitoring system. But this simply does not exist in Europe at present. As a result, the following accidents and incidents have occurred:

1. Maersk Air, Billund, Denmark, (December, 1999)
This Boeing 737, from Birmingham, UK to Copenhagen, Denmark relying on outdated weather information was unable to land at its destination in a severe storm with wind gusts up to 70 knots. Its alternate airport of Malmo was not available as it was having severe thunderstorms, and had been hit by lightning, so the flight diverted to the more distant airport of Billund, but was unable to land there initially due to a cockpit “wind-shear warning”, with winds up to 76 knots after which the crew declared an emergency, went around and then had to land at Billund anyway with extremely low fuel while ignoring another “ wind shear warning”. Just to taxi to the parking area, the crew had to ask for wind checks to comply with wind limitations for

ground operations. The fuel at landing was less than reserve, 890 KG or 25.6 minutes. But, if the aircraft had had to make a second go around it likely would have suffered a flameout, as its projected landing fuel would then have been only 200KG.

The information of the closed airports and unavailable ground installations was not given to the crew in a timely manner (by ATC) including the severe situation at the designated alternate. Only after the first go-around at the destination and a diversion was imminent was this supplied. There was no preflight briefing of the weather conditions by a professional flight dispatcher, nor was any information given to the flight crew by the airline regarding the rapidly changing severe weather conditions and facilities problems during the enroute portion. In a full operational control/flight dispatch system, the crew would have been supported by certified, qualified flight dispatchers with the best information possible, and they could have advised the crew of a course of action well before the situation became an emergency.

2. Hapag-Lloyd, Vienna, Austria (July, 2000)
This Airbus A310 from Crete to Hannover experienced a problem when the landing gear remained extended after takeoff and the crew elected to continue on towards Germany, relying on bad information in the FMS and also operating the aircraft at faster then recommended speed for gear down operation, thereby burning more fuel.

The crew ultimately found it impossible to continue on to their destination, then planned for Munich, then for Vienna, even though they had a low fuel light come on near Zagreb, Croatia. Nevertheless, they continued to Vienna where the aircraft ran out of fuel on final approach and crashed. The Captain has recently been charged with criminal negligence by German authorities.

Initially calls from the pilot to the Company were unsuccessful because of a faulty HF radio. When contact was made the Company instructed the pilot to go to Vienna. Under a proper method of flight supervision with well trained flight dispatchers that instruction would not have been given considering that the fuel on board was insufficient to provide for a gear down operation. In an interview later, the pilot stated that not only did the company not provide enroute support but issued invalid information regarding his fuel range.

In an interview later, the pilot stated that not only did the company not provide enroute support but issued invalid information regarding his fuel range. The use of a competent operational control system utilizing qualified flight dispatchers including a flight watch/flight monitoring system would likely have prevented this accident.

A US flight dispatcher had a situation that exactly mirrored the Hapag Lloyd accident. An Airbus A300 (Eastern Airlines, from La Guardia Airport to Atlanta, Georgia) also took off with a landing gear that failed to retract. The crew called him and discussed the situation, he supplied them with gear down performance numbers, reviewed the increased fuel consumption that would result and he and the Captain agreed that the flight could proceed, but the crew would check with him at a halfway point, near an alternate airport (Charlotte, North Carolina). The crew called at that point, but the fuel consumption rate was higher than projected. The crew had made an error and was using a speed significantly higher than recommended, resulting in the higher rate of fuel burn. When the aircraft was slowed down on the dispatcher's advice, the fuel flow also dropped significantly. The crew and the dispatcher again reviewed the fuel situation, the destination weather and ATC situation and agreed that the aircraft could proceed and land safely, while still having reserve fuel. The aircraft landed safely at its destination with the required reserve fuel. But if the aircraft had not slowed down and all factors not been taken into consideration the situation could easily have been similar to the Hapag Lloyd flight. Hapag Lloyd had no such support. Errors were made, and an accident occurred. Interestingly, the crew in the Hapag Lloyd had also made the same error in flying at too fast a speed. In the Eastern Airlines case, errors were made, but they were corrected because of a flight dispatcher input and no accident occurred.

3. Swiss International, Werneuchen, Germany, (July, 2002).
This SAAB 2000 flight from Basel to Hamburg, flew into severe weather, its destination closed, its alternate closed, and then flew towards Berlin, which also closed due to severe weather (tornados actually occurred that day in Berlin), where the aircraft ultimately made a landing at a nearby closed military airport with only a few moments of fuel remaining which resulted in the destruction of the aircraft. ATC had vectored the aircraft into the front side of the severe weather front. A flight dispatcher could have advised the pilot to go around the back side instead or avoid the weather entirely.

4. SAS Helsinki, Finland, October , 2003. An SAS Airbus A330 from Detroit to Stockholm declared a fuel emergency when it was unable to land at Stockholm and could not make its planned alternate of Gothenburg, diverting to Helsinki. It landed with less than reserve fuel. This was even though the weather forecast for Stockholm had changed more than 3 hours before it missed approach at Stockholm. It had no holding fuel on board, and continued even though ATC had implemented holding procedures at Stockholm. A flight watch/flight dispatch system could have prevented this incident by advising the crew of the poor weather and provided an alternate airport to land at short of the destination, prior to the flight getting into a fuel crisis.

One can see a pattern with the Maersk incident, the Swiss accident and the SAS incident. All three in bad weather going from one airport closed by severe or poor weather to another, running short on fuel, finally landing in desperate situations. But the Maersk and SAS crews were lucky. The Swiss crew was not. But they were all only depending on ATC for their information. And they all wound up in serious trouble. A certified flight dispatcher with the proper information tools, would have known aircraft position, the nature, position and movement of the weather, and the fuel status of the aircraft and its performance, the crew qualifications, the ATC situation, and available alternate airports. This happens routinely in countries which have full operational control/dispatch systems as flight dispatchers communicate with their flights, give them critical safety information, work with them for the best course of action before things become too serious and get them in safely.

There were also two recent serious incidents in Europe with aircraft running into severe hail causing severe damage to both aircraft.

1. A BMI Airbus A321 (May, 2003) in cruise flight at FL340 over Germany heading from Larnaca to Manchester, UK ran into severe hail and was severely damaged. In spite of this the flight continued on into Manchester, crossing Germany, France and the English Channel and a number of suitable airports. There was no operational control/dispatch system which could have warned the crew of the weather ahead, and when the incident happened, to advise the crew to land at the nearest suitable airport, instead of flying hundreds of kilometres to its destination in a badly damaged aircraft.

At the time of the BMI incident a British pilot said that "he didn't need the extra complication of a dispatch system". When asked why he wouldn't want the best safety information available, he didn't answer.

2. An Easyjet Boeing B737 (August, 2003) took off from Geneva and ran into severe hail, resulting in severe damage to the aircraft upon which the aircraft returned to Geneva. Again, there was no operational control/dispatch system tasked with reviewing the weather conditions and providing this information to the crew.

All of these could have been prevented by an effective operational control/flight dispatch system, which would consist of the following:

1. A certified, trained flight dispatcher.
2. A reliable, effective ground-air communication system separate from ATC.
3. Tools, such as manuals and information systems.
4. Regulatory responsibility and authority for the flight dispatcher and pilot-in-command so that they can support each other.
5. Regulatory oversight.

This structured, positive operational control system for all air carriers would ensure the following:

1. A thorough, effective pre-flight planning function that ensures that flights are planned safely and efficiently, that considers all factors, such as weather hazards, facility issues, navaid outages, aircraft systems/performance issues, crew qualifications, ATC restrictions and security concerns.

2. A reliable, effective in flight monitoring/flight watch function that ensures timely safety information is provided to the flight crew/flight while the flight is enroute.

3. This system should be active and not passive, charged with the responsibility to inform the crew when there is a threat to safety. One effective way to ensure the highest and most consistent level of safety would be for the Flight Dispatcher and the Pilot-in Command to have joint responsibility. This way, working as a team, each protects the other when it comes to operational control decisions. The Pilot-In Command would of course still be the commander of the aircraft, but the Flight Dispatcher would be able to prevent the flight crew from continuing on a course of action that is clearly unsafe. This same type of system has been in operation in a number of different countries and has proved to be the safest, as it helps to prevent errors in both poor information and poor judgment.

The pre-flight planning and briefing function ensures that flights are planned in the safest possible way. Flight dispatchers will be knowledgeable in and plan for the following areas:
1. The aircraft's performance limitations.
2. The aircraft's systems and characteristics, including MELs.
3. Payload.
4. The weather situation from origin point through the enroute portion to the destination and alternate.
5. NAVAIDS.
6. Airport facilities, runways and instrument approaches.
7. NOTAMs.
8. ATC routings, minimum enroute altitudes and any delay issues, including chokepoints along the route or severe weather avoidance.
9. Terrain heights and clearance.
10. Flight crew qualifications, (minimums).
11. Any security issues or procedures.
12. Fuel planning, ensuring the required amount of enroute fuel, contingency fuel, holding fuel, alternate fuel reserve fuel and any extra fuel required, such as for MELs or ballast.
13. Weight and balance and dangerous goods.
14. The applicable state regulations regarding air operations.
15. The applicable company policies and procedures regarding air operations.
16. ETOPs requirements when applicable, such special systems requirements, enroute alternates, and weather.
17. Polar requirements when applicable, such as fuel freeze points, communications, special alternates and magnetic unreliability areas.

The flight dispatcher ensures that all of the appropriate safety parameters are followed in each area before the flight departs. He/she then briefs the flight crew on the plan. They discuss the plan and any issues and make any changes that might be necessary, such as route of flight, altitude, payload changes, new ATC information or delays, fuel, altitude or alternates.

The problem is that at airlines where there are no flight dispatchers, there is no one knowledgeable checking these things. In the case of flight planning, someone just pushes a button and the computer spits out a flight plan for the most efficient route. It doesn't consider any of those factors that flight dispatchers do. It doesn't care about hazardous weather, MELs on the aircraft, ATC chokepoints, crew limitations, or any of the other things that clearly can affect the flight. And flight crews, often under pressure to make schedule, seldom have the time to properly consider these issues.

This is how flights like Maersk Air , Swiss, SAS, BMI and EasyJet got into trouble by not having good information of what was ahead of them.

There have been many occasions where flight dispatchers refused to let flights go into what they considered to be hazardous conditions. On one occasion, a flight dispatcher refused to let a flight go into severe winter weather, with freezing rain and high winds at the destination, even though the flight crew was willing to take the flight, as they were going to their home base. When the flight dispatcher explained to the crew what the situation was, the flight was cancelled. At the same time as that flight was scheduled in, another airline which did not have the same dispatch system attempted to land and went off the end of the runway into the harbour. That flight was carrying passengers of flights from other airlines that had been cancelled by flight dispatchers. They all wound up in the water. (World Airways DC-10, Boston Harbour, 1981).

Once the flight crew is briefed and they depart, then the flight is tracked and monitored by the flight dispatcher until it reaches its destination. This is normally now done by graphic displays which show the position of the flight.

During flight, the flight dispatcher is responsible for updating the flight crew on any changes to weather, airports, ATC or any other hazards to the operation.

The crew also has the flight dispatcher to call upon when they have a problem, whether it be an aircraft system failure, fuel shortage, weather, ATC or passenger problem. If the flight cannot make its destination, the flight dispatcher is there to support the flight crew and ensure that they have the latest operational information, and also to keep operational disruptions to the airline to a minimum, such as when a flight might be diverted to one airport or another, then the flight dispatcher will give the crew the preferred airport to lessen the operational impact on the airline, while still maintaining safety.

The main purpose of the flight dispatcher is safety. He/She makes sure that safety considerations do not get overridden by economics and that the flight crew is protected from any economic pressures.

An example of a list of items that a flight dispatcher would review and discuss with the flight crew in the event of an enroute

aircraft system failure, ie engine shut down or other event, would be as follows:

1. Aircraft performance. Is it degraded? What effect? Drift down.? To what altitude? What is the minimum enroute altitude? Do MEL items affect performance?
2. Aircraft systems: Is redundancy affected? Hydraulics, electrical, pressurization, flight controls, avionics. MELs a factor?
3. Weather situation. Enroute fronts, thunderstorms, icing, turbulence. Wind factors. What is the weather situation at the possible alternate airports?
4. State regulations. Diversion requirement if an engine is shut down.
5. Fuel supply. Sufficient for possible diversion points and still have reserve?
6. NOTAMS. Navaids, facilities operative? Closed areas?
7. Airport authorization? Are possible diversion points authorized landing points for the airline? Is all landing/approach data available?
8. Landing weights. Is the aircraft within limits at possible diversion points?
9. ATC situation. Are there airborne delays or other operational restrictions?
10. If an ETOPS flight, then those factors would also be included, such as single engine range, possible weight or fuel dump requirements, systems redundancy, special alternate requirements, etc.
11. If a Polar flight, then those issues would also be considered, such as areas of solar radiation, magnetic unreliability, extreme cold which could freeze fuel, communications unreliability, highly restrictive ATC routings and closed areas, turbulence, icing and special ground facility limitations.

Then there are additional factors, more related to economic factors for the airline.

12. Is ground equipment available at the possible diversion points? Electrical, pneumatic air for starting if necessary, baggage unloading/loading.
13. Customer protection. How best can the passengers get to their destination? Which diversion point would be best from that aspect?
14. Maintenance. Send the aircraft where it can be serviced. Available manpower, facilities and parts.
15. Aircraft routing. What flight is the aircraft due on next? How will this impact the operation down line? Send the aircraft to the point where it will least affect it.
16. Crew legality. What impact will the diversion have on crew legality? Will they be illegal for their next trip?

At air carriers where there are no flight dispatchers, no one is checking this for the crew. Then when there are problems or diversions, there is either no communications or support from the air carrier to the flight crew or they simply want the flight to go somewhere based purely on economic factors, such as customer protection or maintenance servicing or crew recovery. All o the many safety factors are ignored. In other words, they jump down to number 12 on the list, and forget about numbers 1-11 which are critical.

One flight dispatcher had a flight enroute with an engine problem, where the flight would have to shut down the engine. Maintenance wanted to send it to the main maintenance base to change the engine. But the dispatcher refused, advising the flight crew that the weather there was ½ mile visibility in thunderstorms. Maintenance doesn't know or care about other factors

Hapag-Lloyd got into trouble when the flight crew relied on poor information in the FMS and also management requests to continue on with gear down to a further airport. That should not have happened, and if a flight dispatcher had had the authority, it would not have happened. He/she would have told them to land much earlier, knowing that they could not make it

Unfortunately, where operators have used poorly trained and/or no flight dispatchers, history has demonstrated that cruel and sometime deadly results may occur. A lack of an adequate method of supervision has been a contributing factor to several accidents in the recent past. Accident reports indicate that the operator had information within its possession, which might have reduced the potential for the accident, but its method of flight supervision and control failed to supply the flight crew with information that may have prevented the accident.

The lack of an effective operational control/flight dispatch system leaves the European Community air carriers much more vulnerable to security threats. Most of these air carriers cannot even communicate directly with their flights. How are they going to manage a security situation if a 9/11 style attack happens in Europe? The answer is that they could not. In the US on 9/11, flight dispatchers played a key role in getting all of their flights on the ground rapidly to safe airports. They knew the aircraft's position, its performance, its limitations, any systems problems, like MELs, what airports it could safely land at, what the weather/ATC situation was, and could support each flight accordingly, working as a team with the pilot-in-command. In Europe, that capability simply does not exist. Most European air carriers cannot even communicate with their flights while they are enroute. One can only imagine what would happen if a serious security situation arises. For this reason alone a proper system should be required.

The lack of an effective operational control/flight dispatch system in Europe has also left Europe behind in the airline industry regarding technology. While other countries have implemented advanced flight tracking and informational technologies, Europe has been left behind. Even while building excellent aircraft, Europe has not been able to compete effectively in airline operational control management systems because the basic elements of communications and qualified personnel, with flight tracking, along with the regulatory requirements, are simply not there.

The situation regarding operational control/flight dispatch in Europe is reminiscent of the Concorde situation, where there were serious incidents that demonstrated the vulnerability of the aircraft, yet nothing was done prior to over one hundred people being killed. Here we have something similar with many accidents/incidents related to weaknesses in operational control/flight dispatch but no action has been taken.

Some airlines in Europe say that they don't need an effective operational control system because ATC provides for support during flight. This is simply not true. ATC is not capable of providing the information that an operational control/flight dispatch system can provide. ATC controllers are neither trained nor knowledgeable about aircraft performance, the airline's operations policies, the fuel onboard the aircraft, its systems condition and status, or the crew's qualifications/limitations as well as appropriate airports that could be used. ATC is also normally looking only at their own immediate sector, not the over-all general picture, which can be very important in a bad weather situation. ATC controllers' primary responsibility is simply traffic separation. See the above accidents/incidents for the kind of support that ATC provides.

A dispatcher colleague recently asked a crew member at an airline that does not have a dispatch system who had said that they depend on ATC, about how they found out about safety problems down the line and he said "we find out when we get there". IFALDA would submit that this is simply unacceptable. Yet this happens in Europe on a regular basis.

Other airlines say that they simply can't afford the additional expense of a more effective flight dispatch system in the cutthroa deregulated environment that they now face. The facts simply do not bear this out. The US airline industry has been

devastated economically by 9/11 and its aftermath, much more than in Europe. Yet even the lowest cost carriers, like JetBlue and Southwest, have very effective US Part 121 operational control/flight dispatch systems. They are also very profitable. And there are economic benefits to these systems, with more efficient and effective, not to mention safer, operations. They can reduce delays and diversions, lowering costs. This means that carriers like Easyjet and Ryanair, which at present do not have flight dispatch systems, should also have no trouble with them. But they would be safer. In fact, the provision of a dispatch system is a protection against short cuts and pressures on flight crews that could be made by a management pressured to cut costs.

Other countries have seen the benefits of a full operational control/flight dispatch system, In addition to the US and Canada, the People's Republic of China, Malaysia and the United Arab Emirates are among the countries that have recently implemented this safer system.

In Europe, rapid change is coming. Ten new countries joined the European Union on May 01. EASA is replacing the JAA. The Association of European Airlines has said that when harmonization takes place across the EU that it should be to a higher standard, not a lower one, so that the new entrants will have to meet that higher standard. But operational control/flight dispatch in Europe remains at the very lowest standard or none at all. One cannot help but imagine what European passengers would think if they realized that the Chinese and Malaysians have higher safety standards of operational control than Europe does.

The lack of an effective operational control/flight dispatch system in Europe will have ramifications in another important arena, the new bilateral agreement being negotiated between the EU and US. There is a forceful move by the EU to open up markets on both sides of the Atlantic. They want to create a new "open aviation area" which would allow European carriers to carry passengers and cargo from one point in the US and fly them to another point in the US. However, there is a very important barrier to this proposal. No US government, no matter how liberal it might be, would allow foreign carriers to operate domestically in the US with passengers that do not meet the minimum safety standards required by the US under Part 121. And, as we see at present, ICAO and the European JAR-OPS system does not even come close. If there is to be a future increase in globalization by the aviation industry, as seems the trend, then Europe must come up to a substantially safer and improved operational control system that will be comparable to the US system. This will then open markets to European air carriers.

The Commission and the Agency now have the opportunity to have the European Community reap the multiple benefits of effective operational control/flight dispatch. To prevent these kinds of serious accidents/incidents from occurring again, while making the European system safer from security threats, at the same time catching up with an advanced technology and opening new markets to European air carriers. But most importantly, passengers throughout the Community will be safer. They deserve the highest standard of safety, not the weakest and most vulnerable.

IFALDA would like to offer its expertise and assistance for this issue. We appreciate the opportunity to participate in this process. We have also submitted comments to the relevant sections in both the Consultation Document and the Essential Requirements for Air Operations.

Reason

An effective operational control/flight dispatch system would prevent these kinds of serious accidents/incidents from occurring again, while making the European system safer from security threats, at the same time catching up with an advanced technology and opening new markets to European air carriers. But most importantly, passengers throughout the Community will be safer. They deserve the highest standard of safety, not the weakest and most vulnerable. See Attachment.

Response

Comment noted. It is not the intention of these Essential Requirements to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***563 / EASA/Technical Committee***

Comment

Comment 1: It appears that ICAO Annex 6 was worked through and used as a checklist for identifying risks rather than actual accident and incident experience (including frequency). The result is a list of hazards that is very haphazard, not structured and not showing any input from such bodies as JSSI and CAST. Thus, a unique opportunity to improve safety is lost as no sound basis is created for these essential requirements by identifying the real hazards and risks. IACA suggests that the JSSI and CAST groups are consulted to rectify this.

Reason

Response

Comment noted.

Text not changed.

Cmt. *564 / EASA/Technical Committee*

Comment

Comment 2: IACA considers that the essential requirements should include mitigating measures that prevent real and unacceptable risks and not those risks that once were believed to exist but which experience has shown to be non-existent (e.g. break-in markings) or are no longer a risk because of advancing technology (e.g. info on local SAR services). Examples of mitigating measures that prevent unacceptable risks but which are not addressed in these Essential Requirements include ACAS, TAWS and provisions for proper Load Control. In addition, it may be appropriate to include essential requirements to cover other items of importance to safe operations such as Operational Control, Animal Transport and Emergency Response.

Reason

Response

Comment noted. Reference to specific technology cannot be used in general essential requirements.

Text partly changed.

Cmt. *565 / EASA/Technical Committee*

Comment

Comment 3: If comments 1 and 2 above are not addressed and these essential requirements would be adopted virtually as proposed, then they have little or no added value. In that case, IACA is in favour of making ICAO Annex 6 the Essential Requirements.

Reason

Response

Comment noted.

Cmt. *566 / EASA/Technical Committee*

Comment

Comment 4: If ICAO Annex 6 is adopted as the Essential Requirements, this creates the problem of differences. Currently, JAR-OPS has a number of differences with ICAO Annex 6.

Reason

Response

Comment noted.

Cmt. *628 / William H. Stine*

Comment

The National Business Aviation Association (NBAA) appreciates the opportunity to comment on NPA 2/2004 on EASA Essential Requirements for Pilot Proficiency and Air Operations. For 57 years NBAA has represented business aviation interests in the U.S. Today it is supported by nearly 7,700 member companies that operate more than 9,500 aircraft, three-quarters of which are turbine powered. These operations provide U.S. industry with primarily non-commercial air transportation services. Nearly 100 percent of the US Fortune 500 industrial companies operating business aircraft are members of the Association. The Membership generates US$ 5 trillion in annual revenues, a bit more than one half of the total US GDP, and employs over 19 million people worldwide. Additionally and of significant note, over 70% of NBAA's Corporate Members annually operate their aircraft internationally to the benefit of worldwide commerce and trade.
NBAA is a founder member of the International Business Aircraft Council (IBAC) and has been active in its work since its inception in 1981. As you know, we participated with the other members of the Council in developing a knowledgeable and unified position on EASA's NPA 2/2004. This meeting brought together literally hundreds of years of business aviation experience from various parts of the world in an effort to provide EASA the collective guidance of the industry – one whose safety record is without peer. Please know that we appreciate your contribution to this activity.
In attempting to mitigate the tremendous workload that EASA should be experiencing on this most vital NPA, please accept this letter as conveying NBAA's full support of all the positions submitted by the International Business Aircraft Council on this matter.
We would wish to go on record that the extremely short period given for commenting on such a hugely broad-reaching NPA may not be the best approach. While understanding the need to press on in a timely manner, repenting at leisure should never be an option. However, not withstanding, we appreciate the opportunity to comment on this monumental undertaking and stand ready to provide whatever support we may in this EASA undertaking.

Reason

Response

Comment noted. General consultation period has been respected.

Cmt. *628 / William H. Stine*

Comment

Support IBAC Submission in toto

Reason

Support IBAC Submission in toto

Response

Comment noted.

Cmt. *643 / Vitezslav Hezky*

Comment

whole document
The term “pilot in command” used in the text of NPA versus the term “commander”.

Reason

The term “pilot in command” is used in ICAO documentation and in FAA regulations. JAA system of requirements uses the term “commander” whilst the term “pilot in command” means qualification. Proposed amendment to Council Regulation No. 3922/91 prepared by the European Commission, which should be understood as implementing rules for commercial operations of aeroplanes and should be in close relation to this NPA, uses also the term “commander” for the person who is responsible for safety of operations. We propose to take into acount possible confusion which may be caused by the use of these terms and propose to use them in a uniform way in all EU and/or EASA documents.

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for Essential Requirements.

Text not changed.

Cmt. *682 / MOT Germany*

Comment

Provide final version of the intended amendments to Articles 4 and 7 of EU Regulation 1592/2002 in their revised form, considering the implementation of the essential requirements (Annex II).

Reason

We acknowledge that the Parliament is responsible for deciding how the final version of the EU Regulation 1592/2002 will look like. However, we feel that the Parliament should make use of the expertise amongst the aviation community by providing the draft amendments to the Community stakeholders when working on the amendments to EU Regulation 1592/2002.

It is difficult to comment upon the proposed essential requirements when it is not clear how the revised Regulation will look like It would help the stakeholders considerably if they were aware of the roles of all stakeholders when applying the rules.

The proposed essential requirements do not show if and how deep the national authorities will be involved in the enforcement process, including supervising tasks and prosecution procedures.

In so far, we feel that it is not clear which powers are given to the national authorities in case of an enforcement of the essential requirements and associated implementing rules.

Response

Comment noted.

Cmt. *820 / LBA*

Comment

Provide final version of the intended amendments to Articles 4 and 7 of EU Regulation 1592/2002 in their revised form, considering the implementation of the essential requirements (Annex II).

Reason

We acknowledge that the Parliament is responsible for deciding how the final version of the EU Regulation 1592/2002 will look like. However, we feel that the Parliament should make use of the expertise amongst the aviation community by providing the draft amendments to the Community stakeholders when working on the amendments to EU Regulation 1592/2002.

It is difficult to comment upon the proposed essential requirements when it is not clear how the revised Regulation will look like It would help the stakeholders considerably if they were aware of the roles of all stakeholders when applying the rules.

The proposed essential requirements do not show if and how deep the national authorities will be involved in the enforcement process, including supervising tasks and prosecution procedures.

In so far, we feel that it is not clear which powers are given to the national authorities in case of an enforcement of the essential requirements and associated implementing rules.

Response

Comment noted.

Cmt. ***877 / John Thorpe, Chief Executive***

Comment

It is not clear whether the documents relate to all pilots irrespective of what form of aircraft they are flying eg aeroplane, balloon, helicopter, glider or whether it applies to fixed wing aeroplanes. If it is intended to be 'general', than there are many Type Specific Hazards and Essential Requirements that are NOT covered.

Reason

The type of aircraft that the document applies to should be made clearer.

Response

According to this consultation document all aircraft not excluded in Annex II of Regulation (EC) 1592/2002 are included.

Cmt. ***954 / RSA***

Comment

The proposal is to exclude aircraft identified in Annex 2 (amateur built and vintage aircraft) of ER 1592/2002 from the application of Essential Requirements for Operations

Reason

Amateur built and vintage aircraft are not subject to Type certification and in most of the case does not have a flight manual or an operation manual and are not maintained by an approved maintenance facilities.
Documents used to operate and to maintain those aircraft depend of the requirements implemented by National Aviation Authorities of the Member States.
If the Essential Requirements are applied to that Category of aircraft , exemptions will have to be clearly identified and accepted for a number of paragraphs. So , we suggest to consider Amateur Built and Vintage Aircraft as identified in Annex 2 of ER 1592.2002 excluded from the ER applicability as for Airworthiness and Maintenance Requirements.

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. ***977 / EMF***

Comment

The European Microlight Federation, created on September 2003, includes as of today 17 nations of the European Union, representing nearly 40 000 pilots (Belgium – Czech Republic – France – Germany Hungary – Ireland – Italy – Lithuania – Luxembourg –Netherlands – Norway – Poland – Portugal – Spain – Sweden – Switzerland – United Kingdom and 3 Candidates : Malta – Iceland – Cyprus).

One of the aims of the statutes of this Association is to :

« Promote and protect microlighting in Europe (using the description of a microlight to be found in paragrah(e) of Annex II of Regulation(EC) N° 1592/2002 of the European Parliament and of the council of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency), " which is taken to include all aircraft types"

Indeed, Annex II provides that certain categories of "aircrafts" shall be excluded from the scope of application of the EASA Regulation. Specifically, these are single seaters of less than 300kg MTOM and two-seaters of less than 450 kg MTOM, with a stall speed of less than 65 km/h. Besides, a mass credit of 10 % is granted to floatplanes and amphibians.

However, the official english text uses the word « Airplane », which is more restrictive than the word « Aircraft ».

Thus, as a consequence to a restrictive translation and interpretation by EASA, « ultralight gyros, ultralight helicopters and ultralight motorized aerostats », which are not « airplanes » excluded from the scope of application of EASA Regulation, for being respectively gyroplanes and aerostats would fall within the scope of application of such Regulation … and would no longer be ultralights … which seems inconceivable, since they have been considered as such for many years in their respective countries :

Ultralight gyros (France, Germany, Spain, Italy, ….).
Ultralight aerostats (France).
Ultralight helicopters (Italy,…).

A number of technical meetings are being held by european experts on the interpretation of this Annex. We have learned separately that the French DGAC, during these meetings, proposes an interpretation which might justify an amendment to this Annex II, aiming to exclude all types of ultralights, as recognized by current regulations, from the scope of the EASA Regulation

The EMF has reiterated, at its meeting of 15-16 may in DUBLIN, the unanimous wish of its Members to see the adoption of such an amendment to Annex II.

2.

Besides, as we have just underscored, EASA defines a reserved area, left to the appreciation of national authorities :

Single seater of less than 300 kg MTOM,
Two seater of less than 450 kg MTOM,
Stall speed below 65 km/h,
Mass credit of 10 % granted to floatplanes and amphibians.

However, in many member countries of the European Union, a mass credit is also granted to ultralights equipped with a safety parachute. The aim is to promote the usage on ultralights of this effective safety equipment and thus contribute to enhance the safety of ultralighting.

Such a mass credit (5 %) is granted by regulation, notably in France and in Germany ; and these two countries represent half the ultralight fleet and number of pilots of the European Union (17 700 pilots) !

It would thus not be coherent nor conducive to safety to deny such a mass credit of 5 % to ultralights equipped with a parachute (whereas a credit of 10 % is granted to floatplanes and amphibians).

Consequently it would be most harmful to backtrack on this highly sensitive safety issue.

Therefore during their meeting of 15-16 may 2004, the Members of EMF unanimously decided to ask EASA to adopt an amendment to Annex II, aiming to grant a mass credit of 5 % to ultralights equipped with a safety parachute.

3.

Finally, Article 1 of Regulation (CEE) n° 2407/92 dated 23 July 1992 concerning operating licences in relation to air carriers stipulates that the carriage by air of passengers, mail and/or cargo, performed by non-power driven aircraft and/or ultra-light power driven aircraft, as well as local flights not involving carriage between different airports, are not subject to this Regulation

In respect of these operations, national law concerning operating licences, if any, and Community and national law concerning the air operator's certificate (AOC) shall apply.

Thus, the european lawmakers considered that there was no justification to include the commercial activity of air carriage performed by ultralight within the community regulatory framework.

This exclusion can also be found in Annex 2 of Regulation n° 1592/2002 of the European Parliament and Council of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency (Text with EEA relevance) which provides that the design and production of such aircrafts fall exclusively within national jurisdictions.

For the sake of coherence with the present community regulatory framework, it would seem appropriate to exclude from community regulations all commercial operations carried out with ultralight aircrafts.

Moreover, the discrepancies observed between the regulations implemented by the various Member States would require to achieve European integration a major harmonisation work which does not seem to have priority considering the specificity of

this activity.

Reason

Response

Comment noted.

Annex II will be slightly changed.

Cmt. ***978 / Europe Air Sports***

Comment

Europe Air Sports, the Association coordinating the regulatory matters for 25 National Aero Clubs and 4 sports-orientated European Unions, represents about 700 000 active aviators, who exercise Air Sports which is considered to be an aviation activity of competitive and leisure flying within non profit organizations.
Europe Air Sports is a legal body registered in the Netherlands and accredited to all major European institutions, authorities and organizations dealing with aviation.

This package of comments is coordinated within our organization. Due to the spread of air sports from powered flying, gliding, ballooning to microlight flying, hang- and paragliding, parachuting, aeromodelling and amateur-built aircraft we grouped our comments and attach comments on behalf of our members.
This package consists of:
1. This Coverletter;
2. Vision Paper, a high level policy document produced by the Board of Europe Air Sports and coordinated in the organization;
3. Detail comments from Europe Air Sports;
4. Coverletter and detail comments from our member organizations:
a. European Gliding Union (EGU);
b. European Hang & Paragliding Union (EHPU);
c. European Microlight Federation (EMF);
d. Amateur-built Working Party (represented by RSA);

The comments of the European Microlight Federation (EMF) and of various National Aero Clubs have (also) been sent directly to you, but have been cross-referenced to and support the position of Europe Air Sports.

Our consolidated comments cover Annex 1 and Annex 2 of the NPA and give answers to the questions asked in the consultation document. The answers vary depending on the category of airsports, therefore the detailed text and justification again is attached for your convenience.

Europe Air Sports is fully aware about the extreme importance of this NPA because we as largest group of aviators in Europe are going to be affected by possible changes in regulations, which in force could cause in the longer term irreversible damage to the overall aviation system, Europe Air Sports is an essential part of.

Please consider our comments out of this point of view with an open mind. The fascination of flying has and will attract especially the young generation. They should keep this chance.

Reason

Response

Comment noted.

Cmt. ***997 / Europe Air Sports***

Comment

A paragraph, or an annex, must be added to state activities excluded from applications of proposed E.R.
Europe Air Sports support exclusions of Micro-light, Parachuting, Aero modelling, Hang and Paragliding, from proposed E.R.
In addition, Amateur-built and Vintage aircraft must be excluded from proposed E.R. for air operations.

Reason

Consistency with 1592/2002 Annex 2.
Generally speaking aircraft which have no flight manual, ops manual or type certificate, like amateur-built or vintage aircraft, must be excluded from the applicability of proposed E.R. for Air Operations

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. ***998 / Europe Air Sports***

Comment

Proposed E.R. for air operations reflects actual best practice in air operations, but Europe Air Sports want to reaffirm that in case E.R. for air operations will be published by EASA, "Implementing Rules" for Air Sports and light aviation (MTOW less than 2730 kg for example) must be established at national level: National Aero-clubs, National Coordinating Organizations or National Authorities

Reason

It must be considered that standardization of sports and light aviation within Europe is not an actual need (and practically impossible to achieve) to maintain a good level of flight safety. On the other hand, standardization can be adverse to the development of those sports and light aviation activities

Response

Comment noted.

The Basic Regulation will define the entities responsible for developing implementing rules.

Cmt. ***999 / Europe Air Sports***

Comment

Even within the JAA organization many specific arrangements were made or accepted in order to keep a good level of flight safety and a correct development of air sports activities in the different JAA countries. Europe Air Sports supposes (and strongly hopes) that the "Grand Father Rights" principle will continue to apply in the EASA regulations, so those arrangements will not be "destroyed" in the future environment.

Reason

There is a large variety of organizations and "aeronautical culture" within Europe for light and sports aviation.
European standardization is not an actual need for all air sports operations and it is necessary to remind that, in several and important European countries, a large majority of air sports and private pilots do not want to cross a border and want to stay in their usual environment.
Complete change in specific national organizations is not desirable and necessary to improve the level of flight safety in those specific air activities, provided basic principles, generally accepted, are respected. Even more, deep changes in specific arrangements can produce an adverse effect on safety through the large disruptions which can be expected.

Response

Comment noted.

Cmt. ***1181 / LFV Sweden***

Comment

The essential requirements in Annex 2 are generally too detailed, such that parts of the requirements constitute IR-material.

Reason

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Cmt. ***1182 / LFV Sweden***

Comment

The carriage of medical equipment must be added to the list.

Reason

These products can create hazards by creating interference with radio equipment, by increasing the risk of fire, etc. These risks need to be identified and mitigated. The provisions of the ER are considered to be adequate but there is a need to be aware also of these sources of risk.

Response

Comment noted.

Cmt. ***1361 / Civil Aviation Administration FINLAND***

Comment

Reading this NPA No 2/2004 it is not clear which is the total structure of regulations and are these Annexes 1 and 2 coming annexes (Essential Requirements, ERs) of the EASA Basic Regulation (EC) N:o 1592/2002 or annexes of separate Commission Regulation(s) (corresponding system of (EC) No 2042/2003).
The appropriate proposals for amendments of articles 4 and 7 of the Basic Regulation are missing.

If these annexes 1 and 2 will be annexes of separate Commission Regulations (as (EC) No 2042/2003 for continuing airworthiness), the proposed texts of this regulation are missing and the requirements to follow the more detailed Implementing Rules (IRs, EU/EASA - FCL, -OPS and -STD) are missing. The requirements should be given in the regulation and/or in the annexes (ERs).

It would be the most important that in the regulation there are clear requirements for operators to have
Air Operator Certificate (AOC) and Flight Training Organisation (FTO) approval and Type Rating Training Organisation (TRTO) approval and approved Operations Manuals (OM), Training Manuals (TM), Quality System(QS) and
Quality Manual (QM) etc. corresponding the requirements system in maintenance (ref. Articles 3 to 6 of Regulation (EC) No 2042/2004).
Annexes (Implementing Rules, IRs) of a separate Commission Regulation shall be more comprehensive and detailed corresponding JAR - FCL, -OPS and -STD and annexes of Commission Regulation (EC) No 2042/2004 for continuing airworthiness.

Reason

The system and structure of regulations shall be same in different branches of aviation industry (operations, training and maintenance).

Response

It is intended that Annexes 1 and 2 of the consultation become Annexes to the Basic Regulation.
Specific requirements relating to AOC, TRTO, etc. will be part of the implementing rules.

Cmt. ***1488 / Cabin Union Denmark***

Comment

The undersigned Union, representing the Danish Cabin Crew wishes to inform the JAA and the EASA of their total support for the comments and responses sent by the European Transport Workers Federation (ETF) to the NPA 2/2004 and Annexes.
It is the hope of this Union that this exercise will provide for a level playing field in air operations in the European Community, as well as establishing recognised licensing of cabin crew and all other professional personnel involved in air transport safety.

Reason

Response

Comment noted.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

General comment:
The Netherlands support the Draft Essential Requirements for Operations as laid down in the Annex 2. The wording of the ER's for air operations do not seem sufficiently clear on resulting rights and obligations to allow for direct applicability to specific kinds of general aviation operations. Legal revision and rewording of the current text on essential safety elements seems necessary before inclusion of this text in Regulation 1592/2001 on EASA.

Reason

Response

Comment noted. Legal review will take place to ensure consistency.

Paragraph *Article 4*

Cmt. *15 / CAA Belgium*

Comment

Comment :
Delete the content of the annex II and replace with “intentionally left blank”

Reason

- People are leaving the NAAs to work for the Agency.
- The content of annex II puts the NAAs in a position where the NAAs have to develop and maintain a second set of rules for these products and to implement those rules; the NAAs don’t have de resources for this.
- National regulations are always challenged in the name of the free circulation principle.
- All aircraft share the same airspace.

Response

It appears that the commenter is referring to Annex II of Regulation (EC) 1592/2002. This regulation was not included in this consultation process.

Text not changed.

Paragraph *Para 3*

Cmt. *576 / EASA/Technical Committee*

Comment

Suggest to change title into “Flight Operations” as the whole document pertains to “Operations”

Reason

Response

Comment accepted.

Text changed.

1.a

Paragraph

Cmt. *6 / CAA Belgium*

Comment

1.a A flight must not be performed if the crew members and all other operations personnel involved in its preparation and execution are not familiar with applicable laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto.

2. PROPOSED TEXT/ COMMENT:
proposed text:

replace “aerodrome” by “take-off and landing sites”

Reason

The word “aerodrome” is not suitable for helicopter, balloons etc.

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. *7 / CAA Belgium*

Comment

1.a A flight must not be performed if the crew members and all other operations personnel involved in its preparation and execution are not familiar with applicable laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto.

2. PROPOSED TEXT/ COMMENT:
proposed text:

replace “to be used” by (take-off and landing sites) “considered for possible use”

Reason

JUSTIFICATION:

We are not sure the words “to be used” do reflect the necessary planning of alternates which normally are not be used.

Response

Comment agreed.

Text changed but not as proposed.

Cmt. *218 / CAA, UK*

Comment

This requirement is considered to be too onerous and relates to matters that can be better developed by appropriate implementing rules. The draft requirement is based on the ICAO Standards that require the pilot-in-command to comply with the relevant laws, regulations and procedures of the States in which the aircraft is operating. However, in its present form this draft ER puts a significant responsibility not just on the pilot-in-command but on all crew members and all other persons involved in preparation and execution of the flight. Delete 1a in total. Replace with new 1a: -

‘The pilot-in-command must reasonably satisfy himself before the aircraft takes off that the flight can be conducted legally and safely.’

Reason

Accepting the proposition (see Consultation document, question 14c) that these ERs should be applicable to all general aviation including recreational activities, the proposed requirement is considered to be too onerous and relates to matters that can be better developed by appropriate implementing rules.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. *308 / British Airways Plc*

Comment

British Airways proposes to delete paragraph 1a and replace it with ‘all flights must be performed in compliance with the applicable laws and regulations’.

Reason

The current proposal is too detailed for the essential requirements. Furthermore, this issue is already addressed by paragraph 1b (to perform the flight in such a way that the operating procedures in the flight manual or operations manual are followed).

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. *339 / European Helicopter Association (EHA)*

Comment

insert the word „heliport“ after aerodromes with a slash, affected paragraphs 1a

Reason

Editorial
For clarification refer to ICAO Annex-14 which has an Aerodrome Part as well as a Heliport Part

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. ***399 / AEA***

Comment

The AEA proposes to delete paragraph 1a and replace it with 'all flights must be performed in compliance with the applicable laws and regulations'

Reason

The current proposal is too detailed for the essential requirements. Moreover, this issue is already addressed by paragraph 1b e.g. to perform the flight in such a way that the operating procedures in the flight manual or operations manual are followed.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. ***485 / ERA***

Comment

Propose a reference linking this ER to paragraph 5.c 'carriage of data'.

Reason

5.c details the data (in the form of documents) that must be taken on the flight; this data will form much of the knowledge that the crew members will need to be familiar with, as required in paragraph 1.a.

Response

The intent of the two paragraphs is different. Paragraph 1.a addresses what personnel must be familiar with while paragraph 5.c details what data must be carried on board aircraft.

Text not changed.

Cmt. ***486 / ERA***

Comment

1.a A flight must not be performed if the crew members and all other operations associated operational personnel involved in its preparation and execution are not familiar with applicable laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto.

Reason

- "All" personnel involved in the preparation of a flight are not covered by the Basic Regulation and therefore not subject to the ERs. An operator can only be required to assure that contracted-out services meet certain quality milestones; how is EASA going to demand compliance from a de-icing service provider?
- "Operations personnel" implies ground/flight operations only?

Response

Article 1.b of Regulation (EC) 1592/2002 applies to all personel involved in the operation of aircraft.

Text not changed.

Cmt. ***519 / IFALDA***

Comment

1.a A flight must not be performed if the crew members and all other operations personnel involved in its preparation and execution are not familiar with knowledgeable and competent regarding applicable laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto.

Reason

IFALDA believes it is important that minimum standards be applied to all aspects of flight operations. Being familiar with an area does not address a required knowledge or competency. The suggested terminology makes a more affirmative wording, which implies minimum standards. Someone could be familiar with a subject but not be able to perform to a certain level of competency or have a certain level of knowledge.

See Attachment.

Attachment: IFALDA General Comments to Essential Requirements for Air Operations

Comments by IFALDA, the International Federation of Airline Dispatcher Associations.

About IFALDA

IFALDA is a non-profit global professional organization, in existence for more than 40 years, which seeks to enhance professional standards and safety for the airline operational control/flight dispatch function. This is a unique function, which works closely with the flight crews and other functions, such as air traffic control, to make sure that airline operations are safe. The operational control/flight dispatch function deals with two primary tasks, that of pre-flight planning and briefing of the fligh crews, as well as the in-flight monitoring of flights once they have departed until they reach their destination. These are critical safety tasks and in some ways, are the “heart” of the operation of any airline.

The function of operational control/flight dispatch is recognized in both ICAO Annexes I and VI.

IFALDA membership at present consists of some 47 member associations in some 24 countries, in addition to a number of individual memberships from 7 other countries. Total members are some 1777. Included in this are a number of member associations in Europe. These include EUFALDA (The European Federation of Airline Dispatcher’s Associations), as well as associations in Austria, Belgium, Denmark, Finland, Germany, Greece, Iceland, Italy, Ireland, Luxembourg, Norway, Poland, Portugal, Switzerland, and Sweden.

IFALDA Comment.
The Situation regarding Operational Control/Flight Dispatch in Europe.

In the last few years there have been a number of serious accidents/incidents by European air carriers. These have ranged from fuel exhaustion accidents, or fuel emergencies, to aircraft running into severe weather and being significantly damaged.

Even while these serious accidents and incidents have happened, many countries in the European Community have no operational control/flight dispatch requirements whatsoever. No personnel training, no flight dispatcher certification, no communication system and no regulatory responsibility or authority to prevent incidents/accidents. Others have some training requirements. Still others have a certificate but no communications system. And others only provide limited support for “long haul” flights, yet others provide none at all. But none have an effective system that could prevent accidents/incidents.

Some of these accidents/incidents resulted because of the lack of timely, accurate safety information to the crew. Others happened due to the poor judgment of the crew when they continued into a situation, which was unwise on its face, in some cases under economic pressure to complete the operation. In all cases, the air carriers involved did not have an effective operational control/flight dispatch system to provide them with the proper support.

This is a serious deficiency which has had some serious consequences. It is a critical concern of IFALDA that Europe at present does not have an effective operational control/flight dispatch system for air carriers. In fact, it is usual in Europe for air carriers to have neither an effective pre-flight briefing system nor a communication system/flight watch system for their flights. We believe that this is simply unacceptable and is unsafe.

Flights by European carriers are generally planned and filed by computers on what is simply the most efficient route, cruise speed and altitude, for the lowest possible fuel burn, without considering severe/poor weather, NOTAMS, facility problems, ATC issues-restrictions, navaid problems, aircraft performance/system problems/MELs or other operational requirements. They do generally specify alternate airports, but often do not look at whether those airports will actually be legal regarding weather when the flight has to divert there. Flight crews are also often pressed for time and are under pressure and can often miss critical items.

In addition, when flights are enroute, many European air carriers simply do not know where their flights are at any given time, as no one at the air carrier is assigned to track them, and even if they did, could not communicate with them. It is a tribute to the flight crews that more problems do not occur, but even so, they are often left out to hang, all by themselves, with no support from the air carrier. It is not only not the safest system but it is not any system at all.

An effective operation control/flight dispatch system should have, at the minimum, a communication system, qualified, certified personnel/flight dispatchers to operate the system, the proper informational tools for the flight dispatchers and the regulatory authority and responsibility to make the system work properly. This would provide a proper safe preflight briefing and flight monitoring system. But this simply does not exist in Europe at present. As a result, the following accidents and incidents have occurred:

1. Maersk Air, Billund, Denmark, (December, 1999)
This Boeing 737, from Birmingham, UK to Copenhagen, Denmark relying on outdated weather information was unable to land at its destination in a severe storm with wind gusts up to 70 knots. Its alternate airport of Malmo was not available as it was having severe thunderstorms, and had been hit by lightning, so the flight diverted to the more distant airport of Billund, but was unable to land there initially due to a cockpit “wind-shear warning”, with winds up to 76 knots after which the crew declared an emergency, went around and then had to land at Billund anyway with extremely low fuel while ignoring another “ wind shear warning”. Just to taxi to the parking area, the crew had to ask for wind checks to comply with wind limitations for ground operations. The fuel at landing was less than reserve, 890 KG or 25.6 minutes. But, if the aircraft had had to make a

second go around it likely would have suffered a flameout, as its projected landing fuel would then have been only 200KG.

The information of the closed airports and unavailable ground installations was not given to the crew in a timely manner (by ATC) including the severe situation at the designated alternate. Only after the first go-around at the destination and a diversion was imminent was this supplied. There was no preflight briefing of the weather conditions by a professional flight dispatcher, nor was any information given to the flight crew by the airline regarding the rapidly changing severe weather conditions and facilities problems during the enroute portion. In a full operational control/flight dispatch system, the crew would have been supported by certified, qualified flight dispatchers with the best information possible, and they could have advised the crew of a course of action well before the situation became an emergency.

2. Hapag-Lloyd, Vienna, Austria (July, 2000)
This Airbus A310 from Crete to Hannover experienced a problem when the landing gear remained extended after takeoff and the crew elected to continue on towards Germany, relying on bad information in the FMS and also operating the aircraft at faster then recommended speed for gear down operation, thereby burning more fuel.

The crew ultimately found it impossible to continue on to their destination, then planned for Munich, then for Vienna, even though they had a low fuel light come on near Zagreb, Croatia. Nevertheless, they continued to Vienna where the aircraft ran out of fuel on final approach and crashed. The Captain has recently been charged with criminal negligence by German authorities.

Initially calls from the pilot to the Company were unsuccessful because of a faulty HF radio. When contact was made the Company instructed the pilot to go to Vienna. Under a proper method of flight supervision with well trained flight dispatchers that instruction would not have been given considering that the fuel on board was insufficient to provide for a gear down operation. In an interview later, the pilot stated that not only did the company not provide enroute support but issued invalid information regarding his fuel range.

In an interview later, the pilot stated that not only did the company not provide enroute support but issued invalid information regarding his fuel range. The use of a competent operational control system utilizing qualified flight dispatchers including a flight watch/flight monitoring system would likely have prevented this accident.

A US flight dispatcher had a situation that exactly mirrored the Hapag Lloyd accident. An Airbus A300 (Eastern Airlines, from La Guardia Airport to Atlanta, Georgia) also took off with a landing gear that failed to retract. The crew called him and discussed the situation, he supplied them with gear down performance numbers, reviewed the increased fuel consumption that would result and he and the Captain agreed that the flight could proceed, but the crew would check with him at a halfway point, near an alternate airport (Charlotte, North Carolina). The crew called at that point, but the fuel consumption rate was higher than projected. The crew had made an error and was using a speed significantly higher than recommended, resulting in the higher rate of fuel burn. When the aircraft was slowed down on the dispatcher's advice, the fuel flow also dropped significantly. The crew and the dispatcher again reviewed the fuel situation, the destination weather and ATC situation and agreed that the aircraft could proceed and land safely, while still having reserve fuel. The aircraft landed safely at its destination with the required reserve fuel. But if the aircraft had not slowed down and all factors not been taken into consideration the situation could easily have been similar to the Hapag Lloyd flight. Hapag Lloyd had no such support. Errors were made, and an accident occurred. Interestingly, the crew in the Hapag Lloyd had also made the same error in flying at too fast a speed. In the Eastern Airlines case, errors were made, but they were corrected because of a flight dispatcher input and no accident occurred.

3. Swiss International, Werneuchen, Germany, (July, 2002).
This SAAB 2000 flight from Basel to Hamburg, flew into severe weather, its destination closed, its alternate closed, and then flew towards Berlin, which also closed due to severe weather (tornados actually occurred that day in Berlin), where the aircraft ultimately made a landing at a nearby closed military airport with only a few moments of fuel remaining which resulted in the destruction of the aircraft. ATC had vectored the aircraft into the front side of the severe weather front. A flight dispatcher could have advised the pilot to go around the back side instead or avoid the weather entirely.

4. SAS Helsinki, Finland, October , 2003. An SAS Airbus A330 from Detroit to Stockholm declared a fuel emergency when it was unable to land at Stockholm and could not make its planned alternate of Gothenburg, diverting to Helsinki. It landed with less than reserve fuel. This was even though the weather forecast for Stockholm had changed more than 3 hours before it missed approach at Stockholm. It had no holding fuel on board, and continued even though ATC had implemented holding procedures at Stockholm. A flight watch/flight dispatch system could have prevented this incident by advising the crew of the poor weather and provided an alternate airport to land at short of the destination, prior to the flight getting into a fuel crisis.

One can see a pattern with the Maersk incident, the Swiss accident and the SAS incident. All three in bad weather going from one airport closed by severe or poor weather to another, running short on fuel, finally landing in desperate situations. But the Maersk and SAS crews were lucky. The Swiss crew was not. But they were all only depending on ATC for their information. And they all wound up in serious trouble. A certified flight dispatcher with the proper information tools, would have known aircraft position, the nature, position and movement of the weather, and the fuel status of the aircraft and its performance, the crew qualifications, the ATC situation, and available alternate airports. This happens routinely in countries which have full operational control/dispatch systems as flight dispatchers communicate with their flights, give them critical safety information, work with them for the best course of action before things become too serious and get them in safely.

There were also two recent serious incidents in Europe with aircraft running into severe hail causing severe damage to both aircraft.

1. A BMI Airbus A321 (May, 2003) in cruise flight at FL340 over Germany heading from Larnaca to Manchester, UK ran into severe hail and was severely damaged. In spite of this the flight continued on into Manchester, crossing Germany, France and the English Channel and a number of suitable airports. There was no operational control/dispatch system which could have warned the crew of the weather ahead, and when the incident happened, to advise the crew to land at the nearest suitable airport, instead of flying hundreds of kilometres to its destination in a badly damaged aircraft.

At the time of the BMI incident a British pilot said that "he didn't need the extra complication of a dispatch system". When asked why he wouldn't want the best safety information available, he didn't answer.

2. An Easyjet Boeing B737 (August, 2003) took off from Geneva and ran into severe hail, resulting in severe damage to the aircraft upon which the aircraft returned to Geneva. Again, there was no operational control/dispatch system tasked with reviewing the weather conditions and providing this information to the crew.

All of these could have been prevented by an effective operational control/flight dispatch system, which would consist of the

following:

1. A certified, trained flight dispatcher.
2. A reliable, effective ground-air communication system separate from ATC.
3. Tools, such as manuals and information systems.
4. Regulatory responsibility and authority for the flight dispatcher and pilot-in-command so that they can support each other.
5. Regulatory oversight.

This structured, positive operational control system for all air carriers would ensure the following:

1. A thorough, effective pre-flight planning function that ensures that flights are planned safely and efficiently, that considers all factors, such as weather hazards, facility issues, navaid outages, aircraft systems/performance issues, crew qualifications, ATC restrictions and security concerns.

2. A reliable, effective in flight monitoring/flight watch function that ensures timely safety information is provided to the flight crew/flight while the flight is enroute.

3. This system should be active and not passive, charged with the responsibility to inform the crew when there is a threat to safety. One effective way to ensure the highest and most consistent level of safety would be for the Flight Dispatcher and the Pilot-in Command to have joint responsibility. This way, working as a team, each protects the other when it comes to operational control decisions. The Pilot-In Command would of course still be the commander of the aircraft, but the Flight Dispatcher would be able to prevent the flight crew from continuing on a course of action that is clearly unsafe. This same type of system has been in operation in a number of different countries and has proved to be the safest, as it helps to prevent errors in both poor information and poor judgment.

The pre-flight planning and briefing function ensures that flights are planned in the safest possible way. Flight dispatchers will be knowledgeable in and plan for the following areas:
1. The aircraft's performance limitations.
2. The aircraft's systems and characteristics, including MELs.
3. Payload.
4. The weather situation from origin point through the enroute portion to the destination and alternate.
5. NAVAIDS.
6. Airport facilities, runways and instrument approaches.
7. NOTAMs.
8. ATC routings, minimum enroute altitudes and any delay issues, including chokepoints along the route or severe weather avoidance.
9. Terrain heights and clearance.
10. Flight crew qualifications, (minimums).
11. Any security issues or procedures.
12. Fuel planning, ensuring the required amount of enroute fuel, contingency fuel, holding fuel, alternate fuel reserve fuel and any extra fuel required, such as for MELs or ballast.
13. Weight and balance and dangerous goods.
14. The applicable state regulations regarding air operations.
15. The applicable company policies and procedures regarding air operations.
16. ETOPs requirements when applicable, such special systems requirements, enroute alternates, and weather.
17. Polar requirements when applicable, such as fuel freeze points, communications, special alternates and magnetic unreliability areas.

The flight dispatcher ensures that all of the appropriate safety parameters are followed in each area before the flight departs. He/she then briefs the flight crew on the plan. They discuss the plan and any issues and make any changes that might be necessary, such as route of flight, altitude, payload changes, new ATC information or delays, fuel, altitude or alternates.

The problem is that at airlines where there are no flight dispatchers, there is no one knowledgeable checking these things. In the case of flight planning, someone just pushes a button and the computer spits out a flight plan for the most efficient route. It doesn't consider any of those factors that flight dispatchers do. It doesn't care about hazardous weather, MELs on the aircraft, ATC chokepoints, crew limitations, or any of the other things that clearly can affect the flight. And flight crews, often under pressure to make schedule, seldom have the time to properly consider these issues.

This is how flights like Maersk Air , Swiss, SAS, BMI and EasyJet got into trouble by not having good information of what was ahead of them.

There have been many occasions where flight dispatchers refused to let flights go into what they considered to be hazardous conditions. On one occasion, a flight dispatcher refused to let a flight go into severe winter weather, with freezing rain and high winds at the destination, even though the flight crew was willing to take the flight, as they were going to their home base. When the flight dispatcher explained to the crew what the situation was, the flight was cancelled. At the same time as that flight was scheduled in, another airline which did not have the same dispatch system attempted to land and went off the end of the runway into the harbour. That flight was carrying passengers of flights from other airlines that had been cancelled by flight dispatchers. They all wound up in the water. (World Airways DC-10, Boston Harbour, 1981).

Once the flight crew is briefed and they depart, then the flight is tracked and monitored by the flight dispatcher until it reaches its destination. This is normally now done by graphic displays which show the position of the flight.

During flight, the flight dispatcher is responsible for updating the flight crew on any changes to weather, airports, ATC or any other hazards to the operation.

The crew also has the flight dispatcher to call upon when they have a problem, whether it be an aircraft system failure, fuel shortage, weather, ATC or passenger problem. If the flight cannot make its destination, the flight dispatcher is there to support the flight crew and ensure that they have the latest operational information, and also to keep operational disruptions to the airline to a minimum, such as when a flight might be diverted to one airport or another, then the flight dispatcher will give the crew the preferred airport to lessen the operational impact on the airline, while still maintaining safety.

The main purpose of the flight dispatcher is safety. He/She makes sure that safety considerations do not get overridden by economics and that the flight crew is protected from any economic pressures.

An example of a list of items that a flight dispatcher would review and discuss with the flight crew in the event of an enroute aircraft system failure, ie engine shut down or other event, would be as follows:

1. Aircraft performance. Is it degraded? What effect? Drift down.? To what altitude? What is the minimum enroute altitude? Do MEL items affect performance?
2. Aircraft systems: Is redundancy affected? Hydraulics, electrical, pressurization, flight controls, avionics. MELs a factor?
3. Weather situation. Enroute fronts, thunderstorms, icing, turbulence. Wind factors. What is the weather situation at the possible alternate airports?
4. State regulations. Diversion requirement if an engine is shut down.
5. Fuel supply. Sufficient for possible diversion points and still have reserve?
6. NOTAMS. Navaids, facilities operative? Closed areas?
7. Airport authorization? Are possible diversion points authorized landing points for the airline? Is all landing/approach data available?
8. Landing weights. Is the aircraft within limits at possible diversion points?
9. ATC situation. Are there airborne delays or other operational restrictions?
10. If an ETOPS flight, then those factors would also be included, such as single engine range, possible weight or fuel dump requirements, systems redundancy, special alternate requirements, etc.
11. If a Polar flight, then those issues would also be considered, such as areas of solar radiation, magnetic unreliability, extreme cold which could freeze fuel, communications unreliability, highly restrictive ATC routings and closed areas, turbulence, icing and special ground facility limitations.

Then there are additional factors, more related to economic factors for the airline.

12. Is ground equipment available at the possible diversion points? Electrical, pneumatic air for starting if necessary, baggage unloading/loading.
13. Customer protection. How best can the passengers get to their destination? Which diversion point would be best from that aspect?
14. Maintenance. Send the aircraft where it can be serviced. Available manpower, facilities and parts.
15. Aircraft routing. What flight is the aircraft due on next? How will this impact the operation down line? Send the aircraft to the point where it will least affect it.
16. Crew legality. What impact will the diversion have on crew legality? Will they be illegal for their next trip?

At air carriers where there are no flight dispatchers, no one is checking this for the crew. Then when there are problems or diversions, there is either no communications or support from the air carrier to the flight crew or they simply want the flight to go somewhere based purely on economic factors, such as customer protection or maintenance servicing or crew recovery. All o the many safety factors are ignored. In other words, they jump down to number 12 on the list, and forget about numbers 1-11 which are critical.

One flight dispatcher had a flight enroute with an engine problem, where the flight would have to shut down the engine. Maintenance wanted to send it to the main maintenance base to change the engine. But the dispatcher refused, advising the flight crew that the weather there was ½ mile visibility in thunderstorms. Maintenance doesn't know or care about other factors

Hapag-Lloyd got into trouble when the flight crew relied on poor information in the FMS and also management requests to continue on with gear down to a further airport. That should not have happened, and if a flight dispatcher had had the authority, it would not have happened. He/she would have told them to land much earlier, knowing that they could not make it

Unfortunately, where operators have used poorly trained and/or no flight dispatchers, history has demonstrated that cruel and sometime deadly results may occur. A lack of an adequate method of supervision has been a contributing factor to several accidents in the recent past. Accident reports indicate that the operator had information within its possession, which might have reduced the potential for the accident, but its method of flight supervision and control failed to supply the flight crew with information that may have prevented the accident.

The lack of an effective operational control/flight dispatch system leaves the European Community air carriers much more vulnerable to security threats. Most of these air carriers cannot even communicate directly with their flights. How are they going to manage a security situation if a 9/11 style attack happens in Europe? The answer is that they could not. In the US on 9/11, flight dispatchers played a key role in getting all of their flights on the ground rapidly to safe airports. They knew the aircraft's position, its performance, its limitations, any systems problems, like MELs, what airports it could safely land at, what the weather/ATC situation was, and could support each flight accordingly, working as a team with the pilot-in-command. In Europe, that capability simply does not exist. Most European air carriers cannot even communicate with their flights while they are enroute. One can only imagine what would happen if a serious security situation arises. For this reason alone a proper system should be required.

The lack of an effective operational control/flight dispatch system in Europe has also left Europe behind in the airline industry regarding technology. While other countries have implemented advanced flight tracking and informational technologies, Europe has been left behind. Even while building excellent aircraft, Europe has not been able to compete effectively in airline operational control management systems because the basic elements of communications and qualified personnel, with flight tracking, along with the regulatory requirements, are simply not there.

The situation regarding operational control/flight dispatch in Europe is reminiscent of the Concorde situation, where there were serious incidents that demonstrated the vulnerability of the aircraft, yet nothing was done prior to over one hundred people being killed. Here we have something similar with many accidents/incidents related to weaknesses in operational control/flight dispatch but no action has been taken.

Some airlines in Europe say that they don't need an effective operational control system because ATC provides for support during flight. This is simply not true. ATC is not capable of providing the information that an operational control/flight dispatch system can provide. ATC controllers are neither trained nor knowledgeable about aircraft performance, the airline's operations policies, the fuel onboard the aircraft, its systems condition and status, or the crew's qualifications/limitations as well as appropriate airports that could be used. ATC is also normally looking only at their own immediate sector, not the over-all general picture, which can be very important in a bad weather situation. ATC controllers' primary responsibility is simply traffic separation. See the above accidents/incidents for the kind of support that ATC provides.

A dispatcher colleague recently asked a crew member at an airline that does not have a dispatch system who had said that they depend on ATC, about how they found out about safety problems down the line and he said "we find out when we get there". IFALDA would submit that this is simply unacceptable. Yet this happens in Europe on a regular basis.

Other airlines say that they simply can't afford the additional expense of a more effective flight dispatch system in the cutthroa deregulated environment that they now face. The facts simply do not bear this out. The US airline industry has been devastated economically by 9/11 and its aftermath, much more than in Europe. Yet even the lowest cost carriers, like JetBlue

and Southwest, have very effective US Part 121 operational control/flight dispatch systems. They are also very profitable. And there are economic benefits to these systems, with more efficient and effective, not to mention safer, operations. They can reduce delays and diversions, lowering costs. This means that carriers like Easyjet and Ryanair, which at present do not have flight dispatch systems, should also have no trouble with them. But they would be safer. In fact, the provision of a dispatch system is a protection against short cuts and pressures on flight crews that could be made by a management pressured to cut costs.

Other countries have seen the benefits of a full operational control/flight dispatch system, In addition to the US and Canada, the People's Republic of China, Malaysia and the United Arab Emirates are among the countries that have recently implemented this safer system.

In Europe, rapid change is coming. Ten new countries joined the European Union on May 01. EASA is replacing the JAA. The Association of European Airlines has said that when harmonization takes place across the EU that it should be to a higher standard, not a lower one, so that the new entrants will have to meet that higher standard. But operational control/flight dispatch in Europe remains at the very lowest standard or none at all. One cannot help but imagine what European passengers would think if they realized that the Chinese and Malaysians have higher safety standards of operational control than Europe does.

The lack of an effective operational control/flight dispatch system in Europe will have ramifications in another important arena, the new bilateral agreement being negotiated between the EU and US. There is a forceful move by the EU to open up markets on both sides of the Atlantic. They want to create a new "open aviation area" which would allow European carriers to carry passengers and cargo from one point in the US and fly them to another point in the US. However, there is a very important barrier to this proposal. No US government, no matter how liberal it might be, would allow foreign carriers to operate domestically in the US with passengers that do not meet the minimum safety standards required by the US under Part 121. And, as we see at present, ICAO and the European JAR-OPS system does not even come close. If there is to be a future increase in globalization by the aviation industry, as seems the trend, then Europe must come up to a substantially safer and improved operational control system that will be comparable to the US system. This will then open markets to European air carriers.

The Commission and the Agency now have the opportunity to have the European Community reap the multiple benefits of effective operational control/flight dispatch. To prevent these kinds of serious accidents/incidents from occurring again, while making the European system safer from security threats, at the same time catching up with an advanced technology and opening new markets to European air carriers. But most importantly, passengers throughout the Community will be safer. They deserve the highest standard of safety, not the weakest and most vulnerable.

IFALDA would like to offer its expertise and assistance for this issue. We appreciate the opportunity to participate in this process. We have also submitted comments to the relevant sections in both the Consultation Document and the Essential Requirements for Air Operations.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***1700 / ETF***

Comment

As mentioned in other ETF comments and responses to the Consultation document, the ETF considers that Essential Requirements for Cabin Crew Proficiency need to be developed, as for pilots proficiency, in addition and taking full account of the proposed Essential Requirements for Air Operations.

Reason

The number and nature of actual duties and responsibilities of cabin crew have become such that the associated training and checking, as well as the required continuous competency, will not be properly covered by the sole paragraph 7.b.
In the interests of the travelling public, and for the same reasons justifying the need for a cabin crew licence mentioned in the ETF comment on paragraph 1.a, cabin crew proficiency deserves detailed Essential Requirements to be developed in order to complete those on air operations. Taking the proposed essential requirements for pilots proficiency may be appropriate.
The Pilots ERs cover multiple domains covering safety operations. The ETF believes that all are pertinent to cabin crew, in particular: training; practical skills and demonstrated proficiency; maintenance of theoretical knowledge and practical skills and crew resource management. The ETF wishes to highlight that language proficiency is even more paramount and important for cabin crew than for pilots since all cabin crew on board must all be proficient in a common language in order to co-ordinate between themselves as well as being proficient in English as a universal language and any other required at industry level. The capacity to communicate clearly and properly may be the watershed between the saving or loosing of lives.
The ETF further believes that the provisions in the Pilot ERs regarding instructors, examiners, training organisations; medical and physical fitness; aeromedical examiners and centres are all relevant to cabin crew.

Response

At the moment no decision has been taken on the issue of licensing of cabin crew . As soon as it is, the text will be amended accordingly.

Text changed.

Cmt. ***1701 / ETF***

Comment

Insert before the already proposed text:
Prior to the operate a flight, all flight and cabin crew members shall be required to hold a valid license in their respective proficiency areas attesting competency in emergency duties and all other related duties involving the operation, safety and security of the aircraft and of its occupants.

Reason

The ETF noted and appreciates the reference to the license for pilots in paragraph 3.a.1. ER for pilots and for cabin crew in paragraph 7.b.of ER for Air Operations. However, the requirement itself for flight and cabin crew members to be licensed was not found. The ETF considers it paramount that such major requirement be clearly stated in the ERs and developed further on in the implementing rules.
The need for essential proficiency requirements for cabin crew and the need for cabin crew to be subject to community level safety requirements is widely recognised. It is therefore consistent that for cabin crew, as for pilots, compliance with essential requirements be attested through the issuing of a licence by national authorities on the basis of common implementing rules. The link between essential requirements and the issuing of a licence for pilots is fully recognised as historically required by ICAO and detailed requirements are defined in the ER for pilot proficiency.
The case of cabin crew is different. Since the time ICAO did not include cabin crew in the list of personnel to be licensed, aviation, and simultaneously the role of cabin crew, have dramatically changed. Due to the increasing competition and economic pressure put on operators, regulators should not rely on cabin crew training and proficiency standards being left to the discretion of the operator. With the added responsibilities put on cabin crew since September 11th and the new security rules, it is paramount that the EASA regulation ensures, by the means of a cabin crew license, that cabin crew are continuously properly trained, as well as medically and mentally fit and competent, such licence being issued by the Member State through the competent national aviation authorities.
In addition, the ETF insists that the essential requirements put on cabin crew also affect their fundamental freedoms which, as EU citizens, should give them the legitimate professional recognition, rights and protections associated to the privileges of a license.

Response

At the moment no decision has been taken on the issue of licensing of cabin crew . As soon as it is, the text will be amended accordingly.

Text changed.

1.b

Paragraph

Cmt. ***158 / RSA***

Comment

Annex 2 – 1 general – paragraph 1b
A flight must be performed in such a way that the operating procedures specified in the Flight Manual or, where required the Operations Manual, for the preparation and execution of the flight are followed. For that purpose a checklist system must be established for use, as applicable, by crew members for all phases of operation of the aircraft under normal, abnormal and emergency conditions. Procedures must be established for any reasonably foreseeable emergency situation.

COMMENT:
This paragraph is not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification and in most of the case does not have a flight manual or an operation manual. The document used depends of the requirements implemented by National Aviation Authorities.

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Text changed but not as proposed.

Cmt. ***309 / British Airways Plc***

Comment

Propose to add a new paragraph 1 b. plus:
Propose to transfer item 8.e to this place with the following wording
"1.b.plus one pilot amongst the flight crew must be designated as the commander".

Reason

Dual pilot operation is not restricted to a commercial environment. Therefore this essential requirement is applicable not only under 8. The second sentence of 8.e is already addressed in 1.d and should be deleted.

Response

The pilot in command is not designated in general aviation. Nonetheless the issue is now addressed in a revised point 1.c.

Text changed but not as proposed.

Cmt. ***400 / AEA***

Comment

Paragraph 1b (new) and 8e

Propose to add a new paragraph 1 b. plus:
Propose to transfer item 8.e to this place with the following wording

"1.b.plus one pilot amongst the flight crew must be designated as the commander".

Reason

Response

The pilot in command is not designated in general aviation. Nonetheless the issue is now addressed in a revised point 1.c.

Text changed but not as proposed.

Cmt. ***484 / ERA***

Comment

1.b A flight must be performed in such a way that the operating procedures specified in the Flight Manual or, where required the Operations Manual, for the preparation and execution of the flight are followed. For that purpose To facilitate this a checklist system must be established available for use, as applicable, by crew members for in all phases of operation of the aircraft under normal, abnormal and emergency conditions and situations. Procedures must be established for any reasonably foreseeable emergency situation.

Reason

- The "purpose" of the first sentence might be interpreted as "all" procedures should be included in the checklist – which is impossible; therefore to "facilitate" implies only what is needed to "help"
- Making the checklist "available" implies that one has been established, and emphasizes the necessity of having it on-board.
- "conditions" can relate to technical malfunctions etc, whilst adding situations will cover operational aspects which might aris following technical problems.
- Delete the last sentence in entirety - there is no need to repeat what has already been said. Procedures have been established as part of the checklist system, to deal with abnormal and emergency conditions – (and situations).

Response

Comment partly accepted.

Text changed.

Cmt. ***520 / IFALDA***

Comment

1.b A flight must be performed in such a way that the operating procedures specified in the Flight Manual or, where required the Operations Manual, for the preparation and execution of the flight are followed. For that purpose a checklist system must be established for use, as applicable, by crew members and other operations personnel, including flight dispatchers and others as applicable, for all phases of operation of the aircraft under normal, abnormal and emergency conditions. Procedures must be established for any reasonably foreseeable emergency situation. All personnel, both flight and ground, must be trained and competent to perform their respective functions.

Reason

IFALDA notes that there are often other operations personnel that are intimately involved with preparation and conduct of the flight, including flight dispatchers, weight and balance specialists, hazardous/dangerous materials experts, etc. They also need to follow specified procedures that may be in or derived from the Flight Manual or the Operations Manual. Flight Operations is by necessity a team effort with a number of players, both in the air and on the ground who are involved in ensuring the safety of operations.

See Attachment.

Attachment for ER 1.b

There are often other operations personnel that are intimately involved with preparation and conduct of the flight, including flight dispatchers, weight and balance specialists, hazardous/dangerous materials experts, etc. They also need to follow specified procedures that may be in or derived from the Flight Manual or the Operations Manual. Flight Operations is by necessity a team effort with a number of players, both in the air and on the ground who are involved in ensuring the safety of operations. In today's operations situation, this is especially true with a more complex and dynamic environment than ever before, and as shorter and shorter turn times are being demanded of flight crews, there is less and less time for them to properly prepare and consider all possible factors appropriately. These other ground-based personnel, including flight dispatchers who would prepare the flight plan while considering all safety factors, serve to reduce the workload on the flight crews in this difficult environment and ensure a safer operation.

This is also true for abnormal and emergency procedures. If an air carrier has, as it should, a flight monitoring/flight dispatch system, which will properly support the crew while in flight, then abnormal and emergency situations in flight are a critical benefit of that function. These tasks should be clearly spelled out and defined.

Also, please note that by addressing these issues, then appropriate training of all personnel would need to be required so that they are competently able to in fact carry out these tasks.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***567 / EASA/Technical Committee***

Comment

Use of the word "Operations Manual" is confusing. Is it the same as meant in 8b?

Reason

Response

Yes.

Text not changed.

Cmt. ***955 / RSA***

Comment

This paragraph is not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification and in most of the case does not have a flight manual or an operation manual. The document used depends of the requirements implemented by National Aviation Authorities.

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Text not changed.

Cmt. *1183 / LFV Sweden*

Comment

: Guidance is more appropriate than procedures.

Reason

Procedures indicate too rigid a system.

Response

Procedures is the common vocabulary in such cases. The pilot in command may deviate when needed.

Text not changed.

Cmt. *1362 / Civil Aviation Administration FINLAND*

Comment

Change:
… specified in the Flight Manual and when required in the Implementing Rules (EU-OPS) the Operations Manual, ….

Reason

The Operations Manual (OM) is most important manual to set all the operations procedures of the operator. The Operations Manual Part B (OM-B) includes the aircraft type based operating procedures, which the operator is using instead of the Flight Manual (AFM) made by the manufacturer of the aircraft.

Response

As EU-OPS is not adopted, it cannot be referred to.

Text not changed.

Cmt. *1461 / J. Miller*

Comment

1.b For recreational sport pilots (i.e.a pilot fo a glider or powered aircraft less than 2 tonnes or vintage museum aircraft flown for non commercial reasons): The checklist must have printed out all of the checks needed on the ground. In the case of a glider, the checklist may be printed on the panel. The checklist for a powered aircraft must have printed out the pre-takeoff engine checks, pre-takeoff vital actions check, engine fire on ground, cabin fire, engine fire in air, engine failure checks, cruise checks and downwind/landing checks. Preferably, the checklist will have printed out the pre-aerobatic/stalling checks (HASELL although this is not essential, especially in the case of gliders. All checks to be carried out on the ground must be read through one by one as they are carried out by the crew. The emergency checks and in-flight checks need not be read out as they are carried out but must be learnt in advance of the flight by the crew to a suitable standard.

Reason

Response

This would be too specific for essential requirements.

Text not changed.

1.c

Paragraph

Cmt. *8 / CAA Belgium*

Comment

1.c The pilot in command must have available on board the aircraft essential information concerning the search and rescue services in the areas over which the aircraft will be flown.

PROPOSED TEXT/ COMMENT:
comment
This text is not suitable for UAVs

Proposed text:
Place at the end a list of requirements not applicable to UAVs

Reason

For UAVs the pilot in command is not on board.
If one day, UAVs would transport people (an idea which we don't support), then the information is to be available to those people.

Response

Paragraph deleted.

Cmt. *116 / Popular Flying Association*

Comment

Paragraph 1.c
The implementing rules should provide for this essential information to be defined by the national authority.

Reason

As an example, in the UK, a relatively small country, knowledge of the emergency frequency(ies) and of the single national telephone emergency code would almost certainly be considered adequate essential information for search and rescue.

Response

Paragraph deleted.

Cmt. *219 / CAA, UK*

Comment

This requirement should be deleted from the Essential Requirements.

Although carriage of search and rescue information is called for by ICAO Standards, it is not essential to all flights in all aircraft. Accepting the proposition (see Consultation document, question 14c) that these ERs should be applicable to all genera aviation, this requirement is considered too specific. Document carriage requirements should be addressed in appropriate implementing rules.

Reason

It is unnecessary to mandate that search and rescue information be carried on all flights irrespective of the type of aircraft, the purpose of the flight or the area of operation.

Response

Paragraph deleted.

Cmt. *310 / British Airways Plc*

Comment

1.c (and others):
The JAA has introduced the designation "commander" for the pilot in command and operators holding a JAR-OPS AOC already comply. British Airways believes that the Essential Requirements of EASA should continue to use terms that have already have been defined in the JAA-environment unless there is a safety reason requiring a change.

Reason

Any unnecessary change in terminology can lead to confusion reducing safety standards.

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for Essential Requirements.

Cmt. *311 / British Airways Plc*

Comment

The proposes to delete
1.c The pilot in command must have available on board the aircraft essential information concerning the search and rescue services in the areas over which the aircraft will be flown.

Reason

This is too detailed for the essential requirements. Additionally this issue is already covered by the new proposed paragraph 1a (all operations must be performed in compliance with applicable regulations and laws). This topic should continue to be addressed at the implementing rule level as in JAR-OPS 1.050.

Response

Paragraph deleted.

Cmt. *401 / AEA*

Comment

1.c (and others):
The JAA has introduced the designation "commander" for the pilot in command and airlines have complied. We propose that the Essential Requirements of EASA use terms which already have been defined in the JAA-environment.

Reason

In order to be consistent with the existing terminology

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for Essential Requirements.

Cmt. ***402 / AEA***

Comment

The proposes to delete
1.c The pilot in command must have available on board the aircraft essential information concerning the search and rescue services in the areas over which the aircraft will be flown.

Reason

Too much detail for the essential requirements. This issue is already covered by the new proposed para 1a e.g. all operations must be performed in compliance with applicable regulations and laws.. In today's requirements the issue is addressed at the implementing rule level e.g. in JAR-OPS 1.050.

Response

Paragraph deleted.

Cmt. ***568 / EASA/Technical Committee***

Comment

Delete, as it is not essential at all

Reason

Response

Paragraph deleted.

Cmt. ***720 / SNPL / French ALPA***

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for Essential Requirements.

Paragraph deleted.

Cmt. ***884 / John Thorpe, Chief Executive***

Comment

As well as search and Rescue, Interception Procedures should be included

Reason

The current and future security situation

Response

Paragraph deleted.

Cmt. ***1431 / Helicopter Club of Great Britain***

Comment

This rule should state "The pilot in command must have available on board the aircraft details of how to contact the search and rescue services in the areas over which the aircraft will be flown"

Reason

It is contacting the search and rescue services which is important, not how they are organinsed, where they are located, or their size.

Response

Paragraph deleted.

1.d

Paragraph

Cmt. *9 / CAA Belgium*

Comment

1.d The pilot in command must be responsible for the operation and safety of the aircraft and for the safety of all crew members, passengers and cargo on board.

2. PROPOSED TEXT/ COMMENT:

Proposed text:
1.d The pilot in command is responsible for the operation and for the safety of the flight including ground movements related to the flight itself.

Reason

Use of the word "must" is inadequate.

Third party and property on ground have to be taken into consideration.

"The safety of the flight operation" is the safety of third party and property on ground, passengers, crew members, cargo on board and the aircraft itself (which is usually not owned by the PIC).
What is considered to be part of the flight needs a definition for each kind of operation in the implementing rules. E.g; when the doors are closed (not for paradrop), or when moving under its own power, or when the burner is lighted and inflation of the envelope has started ?, etc

Response

Text is according to ICAO definition of flight.

Text not changed.

Cmt. *483 / ERA*

Comment

1.d The pilot in command must be responsible for the operation and safety of the aircraft and for the safety of all crew members, passengers and cargo on board. If for any operational reason the commander is absent, a suitably qualified person must be nominated to assume temporarily the commander's responsibilities.

Reason

ICAO specifies when this resposnsibility should commence and when it ends. From when till when? What if crew, passengers or cargo are on board in the commander's absence?
More usual situations are when cargo is placed on an aircraft before the crew arrive, and similarly left there after the crew have departed; also if cabin crew arrive at the aircraft before the commander arrives, or the commander is called away temporarily during preparation for flight, and the rest of the crew remain to complete their duties. At these times, someone must be responsible.
These ERs are aimed at the aircraft operator – therefore this caveat will ensure that procedures are in place for correct supervision, but also allow the commander to conduct necessary pre and post flight activities away from the aircraft when the situation dictates.

Response

ER apply to all sectors of aviation. The proposed sentence would not be suitable.

Text changed but not as proposed.

Cmt. ***521 / IFALDA***

Comment

1.d
1.d.1. The pilot in command must be responsible for the operation and safety of the aircraft and for the safety of all crew members, passengers and cargo on board.

1.d.2. The air carrier must provide an operational control/flight dispatch system which is required to provide support to the pilo in-command, including both comprehensive pre-flight planning/briefing and in-flight monitoring functions.

Reason

The pilot-in-command must of course be responsible for the safety of the flight, but the need for support of that pilot must be addressed. The pilots cannot do everything by themselves.

See Attachment.

Attachment for ER 1.d

The pilot-in-command must of course be responsible for the safety of the flight, but the need for support of that pilot must be addressed. The pilots cannot do everything by themselves.

This operational control requirement might work better as a separate requirement in the essential requirements, as shown above.

The comprehensive pre-flight briefing would include all of the necessary safety factors, such as considering severe/poor weather enroute and at the destination, fuel issues and planning, available and legal alternate airports, NOTAMS, facility problems, ATC issues-restrictions, navaid problems, aircraft performance/system problems/MELs or other operational requirements.

The in-flight monitoring function would ensure that the pilot would receive critical safety information in-flight in a timely manner, such as weather changes, facility/runway closures, ATC delay factors, etc. before a risk could increase, when options would still be available. The pilot would also have the ability to call dispatch for support when a systems failure, ATC problem, passenger problem or other issue develops.

The in-flight monitoring system is also a critical benefit for security threats, where a pilot would be able to deal with a qualified operations professional/flight dispatcher, along with security personnel to help decide on the best course of action.

These functions to be done by qualified/certificated flight dispatchers to ensure that the tasks are accomplished appropriately. At present, this is just not done.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***569 / EASA/Technical Committee***

Comment

What is the EASA standardised phrase: “pilot in command” or “commander”?

Reason

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for essential requirements.

Text not changed.

Cmt. ***570 / EASA/Technical Committee***

Comment

“The pilot must be responsible for”. This makes no sense. Rephrase into: “One pilot must be designated as …”

Reason

Response

Comment applicable to commercial activities. Refer to 8.e

Text changed but not as proposed.

Cmt. *713 / SNPL / French ALPA*

Comment

To be added. And for the safety and the security of all.

Reason

To cope with the ICAO regulation “8943”

Response

Responsibility for security is not within the scope of EASA.

Text not changed.

Cmt. *720 / SNPL / French ALPA*

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for essential requirements.

Text not changed.

Cmt. *724 / SNPL / French ALPA*

Comment

Responsibility as different juridique meaning in the European country. There is no single European meaning. This is the reason why “responsibility“ in the essential requirements should be more precise. For example, is it civil or penal responsibility. Is the PIC responsible for the produce of his activity (nose, gas exhaust, object falling, fuel dumping, …)

Reason

Response

In legal terms responsibility is different from liability.

Text not changed.

Cmt. *1144 / ECA*

Comment

Please add the following bolded words to this paragraph: “and for the safety and the security of all.”

Reason

To continue to comply with the ICAO regulation “8943”

Response

Responsibility for security is not within the scope of EASA.

Text not changed.

Cmt. *1583 / DGAC*

Comment

Il faudrait sans doute ajouter la sûreté dans les responsabilités du commandant de bord.

Reason

Il apparaît évident que le commandant de bord a également des responsabilités dans ce domaine

Response

Responsibility for security is not within the scope of EASA.

Text not changed.

1.e

Paragraph

Cmt. ***522 / IFALDA***

Comment

1.e Articles or substances, which are capable of posing a significant risk to health, safety, property or the environment, such as dangerous goods, weapons and ammunition, must not be carried on any aircraft, unless specific safety procedures and instructions are applied to mitigate the related risks. There shall be a central point of contact which will be able to resolve any issues which arise regarding these materials. This point of contact shall be available both while the flight is on the ground and i the air.

Reason

IFALDA believes that the flight dispatcher would be a logical choice to be a centralized source of information regarding dangerous goods, etc. and the procedures that would be required. If a problem arises either on the ground or in-flight, the dispatcher would have the tools and knowledge to support the flight crew.

See Attachment.

Attachment for ER 1.e

The flight dispatcher would be a logical choice to be a centralized source of information regarding dangerous goods, etc. and the procedures that would be required. If a problem arises either on the ground or in-flight, the dispatcher would have the tools and knowledge to support the flight crew.

The flight dispatcher should be a single point of contact for the flight crew on all safety/operational matters. This simplifies the communication process and ensures that all necessary measures would be taken and if these factors affect other operational factors. Both the pilot-in-command and the flight dispatcher would know all factors and how they interact or affect each other, such as mass (weight) and balance and performance/payload/fuel burns. The flight dispatcher could discover an error in how the aircraft is loaded and if procedures are not being properly followed.

When communicating with an aircraft in-flight, the flight dispatcher would know where all nearby approved airports are and would know what the weather, facility situation, terrain, fuel supply, aircraft performance/systems/MELS, ATC situation and crew qualifications and regulatory requirements are in order to provide the pilot with the best information to get the aircraft on the ground as soon as possible at a safe location.

A flight dispatcher also can encourage the flight crew to make a decision to get on the ground sooner when necessary, when the crew may not be aware of the seriousness of the problem.

The flight dispatcher also can advise the crew in-flight when a situation arises that was previously unknown, such as a dangerous goods problem, and advise the pilot-in-command about the nature of the problem and then the crew can decide if this is an emergency or not. In a number of countries, flight dispatchers themselves can declare an emergency when they believe that a threat to safety exists. This situation, where dangerous goods are involved, might be one of those situations. Of course, the pilot-in-command should first be advised of the situation, but the flight dispatcher would be there to assist and provide all necessary information to the crew about alternative courses of action.

This of course would require an effective operational control/flight dispatch system with flight monitoring and appropriate training and support on dangerous goods. It would be much safer than what is used now.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***571 / EASA/Technical Committee***

Comment

This paragraph is very broadly stated, particularly because of the words “capable of” and “such as”. Thereby, this paragraph becomes meaningless in practice.

Reason

Response

The wording must be sufficiently broad to ensure that all possible situations are taken into account.

Text not changed.

Cmt. *1461 / J. Miller*

Comment

1.e Recreational sport pilots (who hold a national/police firearms certificate entitling them to carry firearms for sporting purposes) may carry sports firearms and their ammunition in aircraft with the approval in writing of the national aviation authority for the territory of the flight. For example, a shotgun licence holder in the UK wishing to attend a shoot away from his home base (for example in Scotland when living in England) may with suitable written approval fly his shotgun and its ammunition as cargo for that purpose.

Reason

Response

The case presented could be covered by "specific safety procedure".

Text not changed.

Paragraph *General*

Cmt. *3 / LBA Germany*

Comment

1.e: Articles or substances, which are capable of posing a significant risk to health, safety, property or the environment, such as dangerous goods, weapons and ammunition, must not be carried on any aircraft, unless specific safety procedures according to the applicable requirements and instructions are applied to mitigate the related risk.

Reason

Specific safety procedures can only be made, if there are applicable requirements and the procedures must be in accordance with them

Response

These are Essential Requirements that mandate procedures. In case of need, implementing rules will be drafted to detail the content of these specific safety procedures. These will constitute the applicable requirements. There is no need to specify this in the paragraph as it is the structure of the regulatory system.

Text not changed.

1.f

Paragraph

Cmt. *10 / CAA Belgium*

Comment

1.f Data, documents, records and information necessary to record the respect of the conditions specified in 2.a. ? must be retained for each flight and kept available for a minimum period of time compatible with the type of operation.

2. PROPOSED TEXT/ COMMENT:

comment:
wrong reference to 2.a.

Reason

JUSTIFICATION:

self explanatory

Response

Comment accepted.

Text changed.

Cmt. ***165 / Eurocopter***

Comment

Annex 2 Subparagraphs (1.f) and (2.a)

The requirement of subparagraph (1.f) refers to the condition specified in subparagraph (2.a). It seems difficult to understand the relationship between subparagraph (1.f) and subparagraph (2.a).
Is it the intention of subparagraph (1.f) to deal with the availability of facilities such as communication and navigation aids?
In the explanatory note, the JAR-OPS 3.1065 shall have been taken as baseline for subparagraph (1.f). But the JAR-OPS 3.1065 does cover more information than the information about facilities of requirement (2.a).
Clarification of requirement (1.f) is necessary.

Reason

Response

Comment accepted.

Text changed.

Cmt. ***220 / CAA, UK***

Comment

The reference to "2.a." is not understood. Suggest instead -

All required records and all relevant operational and technical information for each individual flight must be retained and kept available for a minimum period of time compatible with the type of operation.

Reason

This clarifies the meaning and removes a confusing cross-reference.

Response

Comment accepted.

Text changed.

Cmt. ***312 / British Airways Plc***

Comment

1.f The text refers to "... conditions specified in 2.a. ..." with respect to records etc.. However there is no mentionin of conditions in 2.a.

Reason

Response

Comment accepted.

Text changed.

Cmt. ***403 / AEA***

Comment

1.f The text refers to "... conditions specified in 2.a. ..." with respect to records etc.. We cannot see any relationship with the contents of 2.a because there is no mentioning of conditions in 2.a.

Reason

Response

Comment accepted.

Text changed.

Cmt. ***482 / ERA***

Comment

1.f Sufficient data, documents, records and information as deemed necessary to record the respect of the conditions specified in 2.a.aid any necessary incident or accident investigation must be retained for each flight and kept available for a minimum period of time compatible with the type of operation and the type of record.

Reason

The reference to ER 2.a does not make any sense –this data in 2.a appears to mean en-route navigation facility NOTAMs: whereas the explanatory note makes clear the purpose of these records is to aid subsequent investigations. JAR OPS 1.1065, as referenced in the explanatory note specifies the length of time various records and data shall be maintained. These time periods are not for accident investigation, but to enable the data and records to be examined during Authority Audits. There may be some confusion here regarding the intended use of the data, and also the source of the data such as FDR.

Response

Comment accepted.

Text changed.

Cmt. ***572 / EASA/Technical Committee***

Comment

This text is not clear. What conditions are meant? What do the words “the respect of” refer to?

Reason

Response

The wording "respect of" is intended to cover proof of compliance. The referenence is incorrect though.

Text changed.

Cmt. ***787 / Airbus***

Comment

We do not understand why there is a specific record-keeping requirement related to paragraph 2.a.

We believe that a generic record-keeping requirement would be more appropriate:
“1.f Data, documents, records and information necessary to record the respect of the conditions specified in 2.a. this Annex 2 must be retained…”

Reason

Response

Comment accepted.

Text changed.

Cmt. ***1461 / J. Miller***

Comment

1.f The pilot of a recreational sport aircraft need not keep his map records, navigation log, meteorological check and NOTAM check records after his flight unless he should have reason to believe that these records may be needed by the authorities to investigate an incident, accident, near miss, airspace infringement or other transgression of avaition law relating to his flight. The reason for this is that for practical purposes the sport pilot only has one map which must be cleaned of past records before the next flight. Also, the pilot should throw away the met and NOTAM check papers after use, because it is easy to confuse these with an old one. The navigation log is often written on the sport pilot's kneeboard on to a transparent sheet on the kneeboard and like the map this needs to be cleaned before the next flight.

Reason

Response

There is an incorrect reference. Furthermore, the final words, "compatible with the type of operation" is intended to allow for alternate means of compliance.

Text changed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

replace the wording …… data, documents and information necessary to record (all necessary information for flight preparation and flight execution) by following text

….all necessary data, records and information for flight preparation , flight execution and follow-up information of the flight…… must be retained

Motivation: current text is unclear and should be further specified.

Reason

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1584 / DGAC***

Comment

La référence au paragraphe 2.a est trop limitée.

Reason

Le paragraphe 2.a ne concerne que la disponibilité des installations. Le JAR-OPS 3.1065, auquel il est fait référence au paragraphe 11 de la note explicative, exige l'archivage du plan de vol exploitation, du compte rendu matériel (C.R.M)., des NOTAM, du devis de masse et centrage, du carnet de route.

Response

Comment accepted.

Text changed.

2.a

Paragraph

Cmt. ***215 / CAA, UK***

Comment

Paragraph 2 Flight Preparation.
It is suggested that there should be a requirement in the chapter 2 'flight preparation' section that the commander has to be satisfied before the flight commences that, with regard to performance, the flight can safely be undertaken.

It is proposed that an additional bullet point paragraph 2.c is introduced as follows:

[The pilot-in-command must be satisfied that:]

- "The flight can safely be undertaken having regard to its performance considered in Paragraph 4 sub-paragraph c."

Reason

In order to further the principle objective of Regulation (EC) 1592/2002, to establish and maintain a high uniform level of civil aviation safety in Europe.

Response

When implementing paragraph 2.c, a pilot will necessarily be led to implement paragraph 4.c. It is therefore not felt necessary to elaborate on this point.

Text not changed.

Cmt. ***523 / IFALDA***

Comment

2. Flight preparation
A flight must not be commenced unless it has been ascertained by every reasonable means available that all the following conditions are complied with. Both the pilot-in-command and the flight dispatcher shall ensure and agree that the flight can be completed safely considering all of the following conditions and will sign a Flight Dispatch Release to that effect.

The Flight Dispatch Release shall contain at a minimum:
1. Flight Number.
2. Aircraft Number or Registration.
3. Type of Operation, IFR or VFR.
4. Origin, Destination, and any Alternate Airports.
5. Minimum required fuel supply, specifying fuel burn to destination, to a designated alternate when required, and reserve, plus any extra, contingency or holding fuel.
6. Any special restriction, as deemed necessary that effects the operation of the flight., such as MELs that affect aircraft performance.
7. The signatures of the pilot-in-command and the flight dispatcher and the time of signing.
8. The ATS flight plan and latest available weather reports or forecasts and NOTAMs for the destination, alternate, or intermediate airports, at time of signing shall be attached to the Flight Dispatch Release.

Reason

To require that “every reasonable means” be used to ascertain that all conditions have been met leaves a huge hole in the system. What is reasonable to one person is not reasonable to another.

See Attachment.

Attachment for ER 2
To require that “every reasonable means” be used to ascertain that all conditions have been met leaves a huge hole in the system. What is reasonable to one person is not reasonable to another. Especially considering that economic pressures are greater than ever, it leaves the system open to loose interpretation and uncertain, non-standard and unsafe outcomes. Air/flight operations need to be precise and structured in order to be safe. This does not mean that economics do not matter, but standards must be held to an absolute minimum in order for the system to have a foundation, which will protect both the passengers and the system itself.

The best method to ensure standards and create a foundation of safety, is to require a specific legal procedure prior to departure, the Flight Dispatch Release, in which the critical factors of the operation and the operational plan is agreed upon by both the pilot-in-command and the flight dispatcher. This serves to ensure proper fuel planning, allowance for operational issues that may arise, and provides the safety margin that every flight should have. One reason that incidents and accidents have been happening in Europe is the inadequacy of pre-flight planning. This would make a tremendous improvement.

Also, by having both the pilot-in-command and the flight dispatcher sign the release, they are both taking responsibility for their actions and are double checking each other to ensure the best course of action has been planned. We must recognize that no one human being can be perfect. This is true of both dispatchers and pilots. But it is also a fact that when two professionals work together as a team and respect each other’s judgment, knowledge and experience, then safety is enhanced.

A study was done by Dr. Phil Smith of Ohio State University, human factors expert, in which pilots and dispatchers were paired off and given specific operational scenarios to see who would be able to pick up errors in operational planning. When just one individual was involved, either pilot or dispatcher, they were successful some of the time. But the success rate of safe decisions went up dramatically when both of them worked together to come up with the best solution. From some 60% successful resolution of the problem to well over 90% success.

Another important factor to having this dual system is that it helps to protect the pilot-in-command from excessive management pressure to operate when conditions are less than marginal. In many cases, flight dispatchers have refused to release the flight under such conditions. On a number of these occasions, the pilot-in-command thanked the flight dispatcher for their support. It is much more difficult to pressure two professionals to do something that they feel is improper than just one. This is especially important with the advent of economic deregulation through out the aviation world and the economic pressures that this brings.

The principle behind this dual system is the same principle which is applied in all other areas of aviation. That of fail-safe desig and redundancy. Just as we require multiple engines, hydraulic systems and electrical systems, this dual system provides a human factors redundancy to ensure that if one person makes a mistake another is there to back them up and correct the problem before it becomes a safety issue.

The items listed in the Flight Dispatch Release are those that would be considered to ensure safe pre-flight planning and briefing.

Response

Comment noted. It is not the intention of these Essential Requirements to mandate the use of flight dispatchers.

Text not changed.

Cmt. *796 / Airbus*

Comment

Move paragraph 4.c here, renumbered 2.i and modified as proposed in our comment on paragraph 4.c.

Reason

See our comment on paragraph 4.c.

Response

When implementing paragraph 2.c, a pilot will necessarily be led to implement paragraph 4.c. It is therefore not felt necessary to elaborate on this point.

Text not changed.

Cmt. *1184 / LFV Sweden*

Comment

: If the requirements are to be this detailed, which the ERs should not be, some AIS-related elements are missing.

Reason

Response

The intention of the essential requirements is that they are general and not too specific.

Cmt. *1363 / Civil Aviation Administration FINLAND*

Comment

Add:
2.i As required in the Implementing Rules (IRs) and the Operations Manual (OM) all flight preparation documents shall be prepared, filled in with the knowledge required and the required copies filed and left on the ground before take-off.

Reason

ICAO Annex 6 standard requirements.

Response

Proposal is too specific for an essential requirement.

Text not changed.

Paragraph

Cmt. *16 / CAA Belgium*

Comment

2.a Adequate facilities directly required for the flight and for the safe operation of the aircraft, including ground or satellite based communication facilities and navigation aids, are available for the duration of the flight.

PROPOSED TEXT/ COMMENT:

proposed text: add at the end:
“taking into account possible delays and diversion.”

Reason

there is a need for a safety margin.

Response

The term execution of the flight along with paragraph 2.g cover the proposed situation.

Text changed but not as proposed.

Cmt. ***117 / Popular Flying Association***

Comment

This requirement appears to make flight without radio illegal. We would like to see it modified to require communication facilities only where the intended flight will take the aircraft into areas where radio communication is mandatory.

Reason

There are still large areas of airspace where radio contact is optional and it is not reasonable to penalise pilots who fly only in such areas by imposing on them the cost of new radio equipment.

Response

The term "required for the flight" is intended to cover the case described in the comment.

Text not changed.

Cmt. ***165 / Eurocopter***

Comment

Annex 2 Subparagraphs (1.f) and (2.a)

The requirement of subparagraph (1.f) refers to the condition specified in subparagraph (2.a). It seems difficult to understand the relationship between subparagraph (1.f) and subparagraph (2.a).
Is it the intention of subparagraph (1.f) to deal with the availability of facilities such as communication and navigation aids?
In the explanatory note, the JAR-OPS 3.1065 shall have been taken as baseline for subparagraph (1.f). But the JAR-OPS 3.1065 does cover more information than the information about facilities of requirement (2.a).
Clarification of requirement (1.f) is necessary.

Reason

Response

Comment accepted.

Text changed in 1.e.

Cmt. ***313 / British Airways Plc***

Comment

British Airways proposes an amendment to paragraph 2a by deleting “ground or satellite based”. I.e.
“Adequate facilities directly required for the flight and for the safe operation of the aircraft, including ground or satellite based communication facilities and navigation aids, are available for the duration of the flight”.

Reason

The essential requirements should address the requirement to be able to communicate/navigate. The technology is not relevan in this respect for the essential requirements. The technology should be addressed at the level of the implementing rules; otherwise the essential requirements will require continuous amendment as technologies change.

Response

Comment accepted.

Text changed.

Cmt. ***404 / AEA***

Comment

The AEA proposes to amend paragraph 2a deleting “ground or satellite based”
Adequate facilities directly required for the flight and for the safe operation of the aircraft, including ground or satellite based communication facilities and navigation aids, are available for the duration of the flight.

Reason

The issue is whether not to be able to communicate/navigate. The technology is irrelevant in this respect for the essential requirements. The technology should be addressed at the level of the implementing rules.

Response

Comment accepted.

Text changed.

Cmt. ***481 / ERA***

Comment

2.a Adequate facilities directly required for the flight and for the safe operation of the aircraft, including ground or satellite based communication facilities and navigation aids, are available for the duration portion of the flight during which they could be required.

Reason

It is not necessary to have a navigation and communication facility available for the whole "duration" of the flight; they may be notified as "on maintenance" during some part of the flight, when they are not required. The same is applicable to destination and diversion aerodromes –on long haul flights, these are usually closed at the time of departure.

Response

The term "required for the flight" is intended to cover the case described in the comment.

Text changed but not as proposed.

Cmt. ***524 / IFALDA***

Comment

2.a Adequate facilities directly required for the flight and for the safe operation of the aircraft, including ground or satellite based communication facilities and navigation aids, are available for the duration of the flight.

2.a.1 The pilot-in-command and the flight dispatcher shall both be responsible that these facilities are available.

2.a.2 The air carrier shall have it's own communication system separate and distinct from ATC in order to ensure that safety information can be provided to the flight crew at all times along the route of flight.

Reason

The present practice of most air carriers in Europe does not meet even the basic requirement of essential requirement 2.a, as no one is checking for facilities outages when they plan the flight. Someone just pushes a button and the computer spits out the most efficient flight plan, regardless of outages. It is left for the flight crew to review the NOTAMs and they may catch an outage, or they may not.

See Attachment.

Attachment for ER 2.a

The present practice of most air carriers in Europe does not meet even the basic requirement of essential requirement 2.a, as no one is checking for facilities outages when they plan the flight. Someone just pushes a button and the computer spits out the most efficient flight plan, regardless of outages. It is left for the flight crew to review the NOTAMs and they may catch an outage, or they may not.

In order to ensure both safer pre-flight planning and monitoring of the status of all navigation and communication facilities, a professional flight dispatcher who has the required knowledge of all of these facilities should be assigned to monitor their status, so that he/she can then inform the pilot-in-command and they can then make adjustments in the operational plan. There have been incidents, for example, where VORs were moved and approach facilities were non-operational and the crew did not know about it.

In order to ensure that navigation aids and communications facilities are available for the duration of the flight, the air carrier itself must have a communication system to inform the pilot-in-command of changes in the operational status of those facilities This will allow the flight dispatcher to support the pilot-in-command throughout the flight. This communication system can be used for all kinds of information related to the safety of the flight, such as hazardous weather, ATC delays or problems, facility issues and security issues.

In addition, the newer generation of communication systems are much more effective, reliable and economical than previous generations.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***788 / Airbus***

Comment

We propose to amend paragraph 2.a deleting "ground or satellite based":
"Adequate facilities directly required for the flight and for the safe operation of the aircraft, including ground or satellite based communication facilities and navigation aids, are available for the duration of the flight."

Reason

The issue is whether not to be able to communicate/navigate. The technology is irrelevant in this respect for the essential requirements. The technology should be addressed at the level of the implementing rules.

Response

Comment accepted.

Text changed.

Cmt. ***883 / John Thorpe, Chief Executive***

Comment

It is not necessary to comply with continuous communication or navigational aids as radio is not mandatory.

Reason

Visual navigation is in many cases a valid method and in any case high ground and distance from transmitter are factors.

Response

The term "required for the flight" is intended to cover the case described in the comment.

Text not changed.

Cmt. ***1432 / Helicopter Club of Great Britain***

Comment

This rule should not require the carriage of communication equipment when it is not necessary for the flight being made

Reason

Many older and vintage aircraft fly without radio or navigation aids. They should remain free to choose to fly this way, outside controlled airspace as they do now. It would be a retrograde and unnecessary step for EASA to mandate radio carriage

Response

The term "required for the flight" is intended to cover the case described in the comment.

Text not changed.

Cmt. ***1461 / J. Miller***

Comment

2a An aircraft need not necessarily carry a radio or navaids. This is especially the case when the aircraft does not have a generator, such as a glider or a vintage sport aircraft such as a DH82A Tiger Moth of which there are a sizeable number still reliably flying in the UK 70 years after they were built, and in cases when the pilot is deaf. There is no need to have a radio when flying outside controlled airspace or when the pilot's movements are approved in advance by the applicable air traffic control units. It is agreed that a squawk transponder would be usesul for deaf pilots to input the distress code 7700 if needed but deaf pilots should not be discriminated against just for that reason especially because not all aircraft even have a generator as explained above.

Reason

Response

The term "required for the flight" is intended to cover the case described in the comment.

Text not changed.

Cmt. ***1585 / DGAC***

Comment

Modifier le paragraphe comme suit :
« Des installations adéquates directement nécessaires pour le vol ou pour l'exploitation sûre de l'aéronef, y compris les installations de communication et aides à la navigation par satellite ou au sol, sont disponibles pour la durée du vol »

Reason

Il n'est pas nécessaire de préciser le type d'aides à la navigation (satellite ou sol). Par ailleurs il n'est pas exclu que demain d' autres moyens soient mis en œuvre (relais aériens par drône par exemple).
Toutes les installations ne sont pas toujours disponibles pendant toute la durée du vol, par exemple l'aérodrome d'arrivée peut être fermé ou indisponible cause MTO au moment du départ, mais être disponible à l'heure estimée d'arrivée.

Response

Comment accepted.

Text changed.

2.b

Paragraph

Cmt. *221 / CAA, UK*

Comment

Last sentence: suggest instead -
… such information must be compatible with any such information that is specified in the Flight Manual or where required the Operations Manual.

Reason

The information may be supplementary to the flight manual/operations manual information.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *314 / British Airways Plc*

Comment

2.b British Airways propose the first sentence is amended to state: "The crew must be made familiar with the location and use of emergency equipment." and a second sentence: "The passengers must be made familiar with the location and use of emergency equipment provided for individual use.'

Reason

Both the first and second sentences address a similar subject, however it is not practical or sensible to make passengers "familiar" with location and use of all emergency equipment. The new wording is consistent with ICAO Annex 6 requirement (paragraph 4.2.11.1e).

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *405 / AEA*

Comment

2.b We propose as first sentence: "The crew must be made familiar with the location and use of emergency equipment." and as second sentence: "The passengers must be made familiar with the location and use of emergency equipment provided for individual use.'

Reason

The first and second sentence are dealing with almost the same subject. As passengers are concerned we consider it is not practicable to make them "familiar" with location and use of all emergency equipment. The new wording is also consistent with ICAO Annex 6 para 4.2.11.1e

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *480 / ERA*

Comment

2.b The crew and passengers must be made familiar with the location and use of emergency equipment. Sufficient related information regarding emergency procedures and use of cabin safety equipment must be made available to the crew. and passengers. Such information must be that specified in the Flight Manual or where required the Operations Manual. Passengers, as necessary, must be made familiar with the location and use of relevant cabin emergency and safety equipment and appropriate information on its use and procedures should be available.

Reason

As the rule stands, it covers too much – should all passengers be made familiar with all emergency and safety equipment in all the aircraft, including different cabins, and the flight deck?
There is a need to separate the knowledge required of the crew and that required of the passengers.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***573 / EASA/Technical Committee***

Comment

It is currently not common practice to familiarize passengers with location and use of (all) emergency equipment but only those items intended for individual use by them. If it is the intention to change this, this should be debated first with stakeholders.

Reason

Response

ICAO annex 6 already defines the obligations related to emergency equipement intended for collective use.

Text changed but not as proposed.

Cmt. ***715 / SNPL / French ALPA***

Comment

The crew must be familiar trough training with…must be available to crew. (and passenger)
(add) The passagers must be briefed on the emergency procedure, location and use of emergency equipment before take off.

Reason

Crew members and passengers can not be at the same level of knowledge about emergency equipment and procedures.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***789 / Airbus***

Comment

First sentence:
"The crew and passengers must be are made familiar with the location and use of individual safety and emergency equipment, and informed of the location and general manner of use of the principal emergency equipment carried for collective use."

Reason

The crew need not be addressed in the first sentence: this is redundant with the essential requirements for pilot proficiency (paragraph 1.d.1 emergency operations) for the flight crew, and with the essential requirements for air operations (paragraph 7.b) for cabin crew.

Our proposed new wording extends the passenger briefing to safety equipment that may or should be used in non-emergency situations (e.g. safety belts), and acknowledges that passengers are not supposed to be given the same level of familiarity with collective emergency equipment. This wording is consistent with ICAO Annex 6 Part I, paragraphs 4.2.11.1 and 4.2.11.2.

Replace "must be" by "are" [chapter 2 construction: a flight must not be commenced unless it has been ascertained (…) that ? paragraphs 2.a through 2.h indicative mood without "must"].

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1145 / ECA***

Comment

Please add the following bolded words to the line one of the text of this paragraph: 'The crew must be familiar through training with the location…'

Please delete ' and passengers' at the end of sentence 2 of the same paragraph.

Please add the following sentence to the end of the paragraph: 'The passengers must be briefed on the emergency procedure, location and use of emergency equipment before take off.'

Reason

Crew-members and passengers cannot be at the same level of knowledge about emergency equipment and procedures.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1185 / LFV Sweden*

Comment

Change the text to read: ...be compatible with the Flight Manual or, where required specified in the OM.

Reason

The FM does not normally specify emergency equipment.

Response

Comment has been evaluated.

Text changed but not as proposed.

Cmt. *1586 / DGAC*

Comment

Modifier le paragraphe comme suit :
« L'équipage et les passagers doivent doit être familiarisés avec, et les passagers informés de, l'emplacement et l'utilisation des équipements d'urgence. Des informations suffisantes correspondantes concernant les procédures d'urgence et l'utilisation des équipements de sécurité en cabine doivent être mises à disposition de l'équipage et des passagers. Ces informations doivent être celles précisées dans associées au document de navigabilité ou, le cas échéant, celles contenues dans le Manuel d' exploitation.»

Reason

Response

Comment accepted.

Text changed but not as proposed.

2.c

Paragraph

Cmt. *17 / CAA Belgium*

Comment

The pilot in command must be satisfied that:
- [...]
- the aircraft is duly registered and that appropriate certificates with respect thereto are aboard the aircraft,
- [...]

PROPOSED TEXT/ COMMENT:

comment
This text is not suitable for UAVs
Proposed text:
Place at the end a list of requirements not applicable to UAVs

Reason

JUSTIFICATION:

self explanatory

Response

UAVs should be registered and have papers on board the aircraft so they can be verified in other ICAO contracting states for instance.

Text changed but not as proposed.

Cmt. *18 / CAA Belgium*

Comment

2.c The pilot in command must be satisfied that:
- [...]
- the mass of the aircraft and centre of gravity location are such that the flight can be conducted safely, taking into account expected variations of those parameters during that flight,
- [...]

Reason

The pilot must be satisfied it is not only correct at take-off but also during the entire flight.

Response

The phrase "can be conducted safely" includes any forseeable deviation.

Text changed but not as proposed.

Cmt. ***159 / RSA***

Comment

Annex 2 – 2 flight preparation – paragraph 2c
First bullet – the aircraft is airworthy as specified in chapter 6
Last bullet – the aircraft operating limitations as specified in chapter 4 will not be exceeded at any time during the flight

COMMENT:
Those sentences are not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification .
Refer to comment on chapter 4 and 6

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. ***222 / CAA, UK***

Comment

Some classes of aircraft are not required to be registered. For aircraft that are required to be registered the Certificate of Registration is not required to be carried on all flights. Accepting the proposition (see Consultation document, question 14c) that these ERs should be applicable to all general aviation, this requirement is considered too specific. Document carriage requirements should be addressed in appropriate implementing rules.
Suggest instead -

[The pilot-in-command must be satisfied that:]

- the aircraft has on board the documents which are required to be carried;

Reason

This makes the requirement more suitable for general application.

Response

Comment accepted.

Text changed.

Cmt. ***224 / CAA, UK***

Comment

Add seventh bullet (see also comments on Annex 2, 7.e): It is essential that crew members are fit to perform their duties. This reflects ICAO Standards such as Annex 6, Part II, 4.14 -

[The pilot-in-command must be satisfied that:]

- no crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, or the effects of alcohol or drugs.

Reason

This is a general duty applicable to the operation of all aircraft.

Response

This is covered by paragraph 7.f.

Text not changed.

Cmt. ***315 / British Airways Plc***

Comment

2.c
British Airways proposes paragraph 2c is amended to state:
The pilot in command must be satisfied that:
- the aircraft is airworthy as specified in Chapter 6
- the aircraft certificate of registration and other certificates required to be carried are on-board
- the required equipment is operative
- the mass and centre of gravity are such that the flight can be conducted safely
- the aircraft is properly loaded and the load is secured
- the operating limits specified in the flight manual will be adhered to.

Reason

The current proposal is too detailed for essential requirements. The revised wording covers all situations including departure with partially inoperative equipment under MEL procedures.

The requirements specified in Chapter 6 are the operator's responsibility. It is not practical to require the pilot in command to be familiar with all airworthiness tasks but he must be informed that the appropriate tasks (as defined in the implementing rules for continuing airworthiness e.g. EC Regulation 1702/2002) have been completed.

Response

With regard to ICAO Annex 6 the PIC must be satisfied that all required actions have been taken even if the responsibility for the execution of the continuing airworthiness activities lies with the operator.

Text not changed.

Cmt. ***406 / AEA***

Comment

2.c
The AEA proposes to amend paragraph 2c
The pilot in command must be satisfied that:
- the aircraft is airworthy as specified in Chapter 6
- the aircraft certificate of registration and other certificates required to be carried are on-board
- the required equipment is operative
- the mass and centre of gravity are such that the flight can be conducted safely
- the aircraft is properely loaded and the load is secured
- the operating limits specified in the flight manual will be adhered to.

Reason

The current proposal is too detailed for essential requirements. The revised wording covers all situations including departure with partially inoperative equipment under MEL procedures.

The requirements specified in Chapter 6 are the operator's responsibility. The pilot in command does not have to be familiar with all airworthiness tasks but has to be informed that the appropriate tasks (as defined in the implementing rules for continuing airworthiness e.g. EC Regulation 1702/2002) have been accomplished

Response

With regard to ICAO Annex 6 the PIC must be satisfied that all required actions have been taken even if the responsibility for the execution of the continuing airworthiness activities lies with the operator.

Text not changed.

Cmt. ***479 / ERA***

Comment

2.c The pilot in command must be satisfied that:
- the aircraft is airworthy as specified in chapter 6,
- the aircraft is duly registered and that appropriate certificates with respect thereto are aboard the aircraft,
- all instruments and equipment as specified in chapter 5 required for the execution of that flight are installed in the aircraft and are operative in accordance with the MMEL/MEL
- the mass of the aircraft and centre of gravity location are such that the flight can be conducted safely,
- all cabin baggage, hold luggage, freight and cargo is properly loaded and secured, and
- the aircraft operating limitations as specified in chapter 4 will not be exceeded at any time during the flight.

Reason

Optional amendment depending on what changes are made to chapter 5 regarding the use of MMEL and MEL: provided adequate provision is made in 5, then it may not be necessary to include it here.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***525 / IFALDA***

Comment

2.c The pilot in command must be satisfied that:
• the aircraft is airworthy as specified in chapter 6,
• the aircraft is duly registered and that appropriate certificates with respect thereto are aboard the aircraft,
• all instruments and equipment as specified in chapter 5 required for the execution of that flight are installed in the aircraft and are operative
• the mass of the aircraft and centre of gravity location are such that the flight can be conducted safely,
• all cabin baggage, hold luggage, freight and cargo is properly loaded and secured, and
• the aircraft operating limitations as specified in chapter 4 will not be exceeded at any time during the flight.
2.c.1. The pilot-in-command and the flight dispatcher shall ensure:
• all instruments and equipment as specified in chapter 5 required for the execution of that flight are installed in the aircraft and are operative
• the mass of the aircraft and centre of gravity location are such that the flight can be conducted safely,
• the aircraft operating limitations as specified in chapter 4 will not be exceeded at any time during the flight

Reason

By requiring the pilot-in-command and the flight dispatcher to be responsible for the above, proper pre-flight planning and briefing is assured. They can both double check each other and provide a safer outcome for the passengers.

See Attachment.

Attachment for ER 2.c

By requiring the pilot-in-command and the flight dispatcher to be responsible for the above, proper pre-flight planning and briefing is assured. They can both double check each other and provide a safer outcome for the passengers.

The instruments and equipment requirement relates to MEL issues, where there may be no-go items or performance penalties or restrictions.

The mass and balance requirement goes to aircraft performance and fuel planning, which a dispatcher should be involved with, as well as proper loading.

The aircraft operating limitations apply clearly to pre-flight planning, the choice of routes, altitudes and speeds, all of which are incorporated in pre-flight planning and fuel issues, which would be part of an operational control/flight dispatch/flight monitoring system.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***574 / EASA/Technical Committee***

Comment

Add at end of 3rd bullet: “except as provided for in the MEL or equivalent.”

Reason

Response

Comment accepted.

Text changed.

Cmt. ***575 / EASA/Technical Committee***

Comment

5th bullet: what is the difference between cargo and freight?

Reason

Response

Comment accepted.

Text changed.

Cmt. ***714 / SNPL / French ALPA***

Comment

Add a paragrpah :
The PIC can disembark any passager or crew members who is a threat for the health of any other person on bord or who can disturb the good order during the flight.

Reason

Flight safety for european citizen is includes also not to be submited to violence or to catch a disease during the flight. This special and exceptional prerogative for the PIC must be written in a high level regulation text as Essential Requirements.

Response

This is covered by paragraph 1.c.

Text not changed.

Cmt. ***720 / SNPL / French ALPA***

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for essential requirements.

Text not changed.

Cmt. ***790 / Airbus***

Comment

The pilot in command commander must be is satisfied that:
• The aircraft is airworthy as specified in chapter 6 The certificate of airworthiness, restricted certificate of airworthiness or permit to fly is valid for the intended flight and aboard the aircraft, and any necessary maintenance has been performed in accordance with Chapter 6
• The aircraft is duly registered (…)

Reason

Replace “must be” by “are” [chapter 2 construction: a flight must not be commenced unless it has been ascertained (…) that ? paragraphs 2.a through 2.h indicative mood without “must”].

Article 29 of the Chicago Convention requires the certificate of airworthiness aboard the aircraft.

Usually (and especially in commercial transport) the commander does not directly determine that the aircraft is airworthy, but he must have evidence thereof, through the airworthiness certificate and appropriate maintenance records.

Response

Comment partially accepted.

Text changed.

Cmt. ***956 / RSA***

Comment

Those sentences are not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification .
Refer to comment on chapter 4 and 6

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. *1146 / ECA*

Comment

Please add the following bullet point:
'The pilot in command can de-board any passenger or crew-member who is disruptive or poses a threat to other persons on board'.

Reason

Flight safety for European passengers goes beyond preventing violence or the spread of disease during a flight. This important prerogative must be accorded the pilot in command and written into legislation as an Essential Requirement.

Response

This is covered by paragraph 1.c.

Text not changed.

Cmt. *1186 / LFV Sweden*

Comment

Change "safely" to "within prescribed limits".

Reason

"Safely" is too vague.

Response

Comment accepted.

Text changed.

Cmt. *1433 / Helicopter Club of Great Britain*

Comment

Private flights are not required to carry the registration certificate on board the aircraft for domestic flights. There is no need to change this situation. This especially applies to flights starting from and ending at the same airfield, provided the certificate is available on the ground.

Reason

Certificates kept in the aircraft can get lost, damaged and would not be accessable when the aircraft is flying. Whilst carriage of documents is required for commercial flights, it is not necessary for provate flights within the home country

Response

The registration papers should be on board an aircraft even in the case of flights starting and ending at the same airfield as they could be forced to divert. Furthermore this is an ICAO SARP.

Text changed.

Cmt. *1531 / MOT/PW&WM NL*

Comment

delete the last part of the sentence
- The aircraft is duly registered and the appropriate certificates with respect thereto are aboard the aircraft

Reason

The method of documentation and the location of documents is not essential to safety

Response

Papers should be on board the aircraft so they can be verified in other ICAO contracting states for instance. Furthermore this is an ICAO Annex 6 SARP.

Text changed.

Paragraph *3rd bullet*

Cmt. *223 / CAA, UK*

Comment

There is a contradiction between "all instruments" and "required… for that flight", therefore suggest delete the word "all"; thus

• all instruments and equipment as specified in chapter 5 and required for the execution of that flight are installed in the aircraft and operative;

Reason

This clarifies the meaning and removes ambiguity.

Response

Comment accepted.

Text changed.

2.d

Paragraph

Cmt. *19 / CAA Belgium*

Comment

2.d Information regarding meteorological conditions for departure, destination and alternate aerodromes, as well as en-route conditions, must be available to the flight crew. Special attention must be given to potentially hazardous atmospheric condition

Proposed text:
Replace “aerodrome” with “take-off/landing site”

Reason

JUSTIFICATION:

aerodrome is not suitable for helicopter, balloons etc.

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. *225 / CAA, UK*

Comment

According to the explanatory note, this draft ER is based on ICAO Annex 6 Part II, 4.5 but it includes significant elements from standards that relate to IFR flight only. ICAO Annex 6 Part II, 4.5 requires only that the pilot-in-command be familiar with all available meteorological information. A requirement that such information must be available is considered to be necessary only for IFR flights, e.g. when no alternate is required. Accepting the proposition (see Consultation document, question 14c) that these ERs should be applicable to all general aviation, it is considered inappropriate that this IFR requirement should be applied to flights conducted under visual flight rules. Requirements that are specific to IFR flights should be addressed in appropriate implementing rules.

Suggest instead -

The pilot-in-command must be familiar with all available meteorological information appropriate to the intended flight.

Reason

It is inappropriate to apply IFR operating rules to all flights.

Response

The comment concerning alternate airports is accepted. The information concerning the weather conditions on the other hand seems to be essential to flight safety.

Text changed but not as proposed.

Cmt. ***316 / British Airways Plc***

Comment

British Airways proposes paragraph 2d is amended to state: as 'Sufficient meteorological information for the flight to be conducted safely is available to the flight crew'

Reason

The current proposal is too detailed for the essential requirements.

Weather data is provided by the State in accordance with ICAO Annex 3.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text changed to cater for alternates.

Cmt. ***407 / AEA***

Comment

The AEA proposes to rewrite the paragraph 2d to read as 'Sufficient meteorological information for the flight to be conducted safely is available to the flight crew'

Reason

The current proposal is too detailed for E.R.

Weather data is provided by the State in accordance with ICAO Annex 3.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text changed to cater for alternates.

Cmt. ***526 / IFALDA***

Comment

2.d Information regarding meteorological conditions for departure, destination and alternate aerodromes, as well as en-route conditions, must be available and reviewed by to the flight crew and flight dispatcher. Special attention must be given to potentially hazardous atmospheric conditions

2.d.1. There shall also be means provided to keep the flight crew updated with all available relevant meteorological conditions including potentially hazardous meteorological while the flight is en-route. The flight dispatcher shall be responsible for ensurin that the flight crew is provided with this information.

Reason

To only say "available" does not mean the flight crew have to actually review and analyze the information. "Reviewed" makes the requirement more certain.

Adding the flight dispatcher ensures that the pilot-in-command will be supported properly and have the relevant information.

See Attachment.

Attachment for ER 2.d

To only say "available" does not mean the flight crew have to actually review and analyze the information. "Reviewed" makes the requirement more certain.

Adding the flight dispatcher ensures that the pilot-in-command will be supported properly and have the relevant information. Incidents have occurred where the flight crew did not have the relevant information when they needed it. This will make sure that they do and receive a proper briefing. A key factor, however, is that while the flight is enroute it must receive information of any changes and hazards. Meteorology is very complex and dynamic. A number of accidents/incidents have been caused by unforeseen changes in meteorological conditions while enroute, which the flight crew was unprepared for, as follows:

- Maersk Air B737, Billund, Denmark, December, 1999, encountered severe weather, had outdated weather information, destination and alternates closed; fuel emergency.
- Swiss SAAB 2000 Werneuchen (Berlin), July, 2002, encountered severe weather, destination and alternates closed, fuel exhaustion, aircraft destroyed.
- BMI A321, Over Germany, May, 2003, encountered severe weather/ hail, serious damage, aircraft continued for hundreds of kilometres before landing.
- EasyJet B737 Geneva, August,, 2003, encountered severe weather/hail, serious damage.
- SAS A330, Helsinki, October, 2003, continued with no holding fuel into low visibility/missed approach at destination, insufficient fuel for alternate; fuel emergency.

The flight dispatcher cannot support the flight crew and prevent these kinds of accidents unless means of communication is provided and they are given responsibility to provide that information.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***791 / Airbus***

Comment

Information regarding meteorological conditions for departure, destination and alternate aerodromes, as well as en-route conditions Sufficient meteorological information, as appropriate to the intended flight, must be is available to the flight crew. Special attention must be given to potentially hazardous atmospheric conditions.

Reason

The amount and nature of needed meteorological information depends on the nature of the flight (local, VFR, IFR…).

Replace "must be" by "is" [chapter 2 construction: a flight must not be commenced unless it has been ascertained (…) that ? paragraphs 2.a through 2.h indicative mood without "must"].

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text changed to cater for alternates.

Cmt. ***1187 / LFV Sweden***

Comment

Insert "where applicable" as follows:
"…destinations and, where applicable, alternate aerodromes, as well as…".

Reason

Alternate aerodromes are not always required.

Response

Comment accepted.

Text changed.

Cmt. ***1434 / Helicopter Club of Great Britain***

Comment

This rule should not require absolute advance knowledge of en-route meterological conditions, as it is generally not available. Meterological reports are only available from airfields en-route, and of course there are distances between airfields. The rule should simply require the pilot to satisfy himself that the flight can be made safely, which includes meterological research

Reason

To avoid a narrow interpretation of the rule. It is simply not possible to research meterological conditions for every kilometer of every flight. The pilot has to make a judgement based on available meterological information.

Response

It is not the intent of this paragraph, nor of its wording to "require absolute advance knowledge of en-route meterological conditions".

Text not changed.

Cmt. ***1461 / J. Miller***

Comment

2d For collision avoidance, other safety and airspace infringement purposes, the pilot, even a sport pilot, must also check the applicable NOTAMs.

Reason

Response

Comment accepted.

Text changed in point 2.a.

2.e

Paragraph

Cmt. ***317 / British Airways Plc***

Comment

British Airways proposes the paragraph is amended to read as 'In case of known or expected ground or in-flight icing conditions, the aircraft must be certified, equipped and/or treated to cope with such conditions'

Reason

Clarification.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***408 / AEA***

Comment

The AEA proposes to rewrite the paragraph to read as 'In case of known or expected ground or in-flight icing conditions, the aircraft must be certified, equipped and/or treated to cope with such conditions'

Reason

Clarification

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***478 / ERA***

Comment

Option 1: delete paragraph 2.e entirely.

Option 2: change text.
2.e A flight must not be planned to operate in In case of known or expected icing conditions, unless the aircraft must be is appropriately certified, and equipped and treated to cope with such conditions.

Additional Comment: The Explanatory Note – List of Hazards should include the following:
- Contamination of airframe, engine and critical surfaces prior to departure
- Inappropriate, inadequate or incorrect application of de/anti-icing fluids and procedures
- Anti-icing fluid failing to provide advertised holdover time
- Inappropriate, inadequate or incorrect pre and post de/anti-icing inspections

Propose another ER, paragraph 2.xx is created to cope with these hazards, ie: "A flight must not depart unless…….free of contamination….critical components and surfaces ….and conditions in ER 2.e are met".

Reason

1. This requirement appears to be covered in paragraph 4.a.
2. However, if the paragraph remains, it should be changed as shown, because it is relevant to the pre-flight planning stage.

Comment: The words "and treated" imply that the issue of ground anti-icing is being addressed. The issue of de and anti-icing of aircraft on the ground is sufficiently serious on its own, and different from flight in icing conditions, that the two areas should be separated.

Proposal: ER 2.e should deal with the case of a "clean" aircraft encountering icing in flight; whereas another ER should address the case where an aircraft is on the ground, pre-flight, and contaminated or likely to become contaminated before take-off.

Response

The concerns raised are addressed in point 4.c. Furthermore, icing is identified as a possible hazard without being decomposed into sub hazards.

Text not changed.

Cmt. ***527 / IFALDA***

Comment

2.e In case of known or expected icing conditions, the aircraft must be certified, equipped and treated to cope with such conditions. The flight dispatcher shall provide information to the pilot-in-command regarding icing conditions both before and during the flight.

Reason

This change would make a professional, knowledgeable flight dispatcher responsible to ensure that the crew has all of the information they need regarding icing and does not proceed into hazardous icing. This would also apply if an item on the aircraft was inoperative, such an anti-ice system.

Response

It is not the intention of the ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***792 / Airbus***

Comment

In case of known or expected ground or in-flight icing conditions, the aircraft must be is certified, equipped and/or treated to cope with such conditions

Reason

Clarification.

Replace "must be" by "is" [chapter 2 construction: a flight must not be commenced unless it has been ascertained (…) that ? paragraphs 2.a through 2.h indicative mood without "must"].

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***903 / European Gliding Union***

Comment

Gliders should be exempted from the requirement to have a de icing system.

Reason

Cloud flying in gliders is allowed in some countries for gaining altitude, an environment in which icing may occur. This kind of operation must be permitted without de-icing systems if the glider is approved for cloud flying. De-icing systems are technically neither feasible nor applicable to gliders.

Response

Essential requirements cannot authorise flight outside the certified flight envelope of an aircraft.

Text not changed.

Cmt. ***1116 / ECOGAS***

Comment

"In case of anticipated or potential flight into known or expected..."

Reason

Response

Comment noted.

Text not changed.

Cmt. ***1188 / LFV Sweden***

Comment

1. Insert "flight into" as follows: "In case of flight into known or expected…".
2. Change "and" to "and/or".

Reason

1. For a better clarity.
2. Treatment is not always relevant.

Response

Comment accepted.

Text changed.

Cmt. ***1226 / British Gliding Association***

Comment

Gliders should be exempted from the requirement to have a de icing system.

Reason

Cloud flying in gliders is allowed in some countries for gaining altitude, an environment in which icing may occur. This kind of operation must be permitted without de-icing systems if the glider is approved for cloud flying. De-icing systems are technically neither feasible nor applicable to gliders.

Response

Essential requirements cannot authorise flight outside the certified flight envelope of an aircraft.

Text not changed.

Cmt. *1473 / Dr. J. Scarfe*

Comment

2.e In case of known or expected icing conditions, the aircraft must
be certified, equipped and treated to cope with such conditions, or an alternative course of action must be available to the crew which avoids or exits the icing conditions without hazard to the flight.

Reason

The explanatory note suggests that fatalities have been caused by the entrance of an aircraft into icing conditions by an aircraft not equipped to do so. This is not strictly correct. The fatalities are invariably caused by an attempt by the crew to sustain flight in the icing conditions. In many operational scenarios, the safest overall flight trajectory cannot be achieved without the possibility of exposure to icing conditions. Icing is unpredictable, and may be expected in a wide variety of conditions, leading to warnings of icing in many circumstances in which icing is not, in fact, encountered.

For example, airways over much of Europe have minimum altitudes of 8 to 9000 ft, which puts them above the freezing level for all but a small proportion of the year. Thus a choice may exist between IFR flight in the airway and VFR flight below the airway. The latter may, icing aside, be possible but bear a vastly higher overall risk, due to poor weather conditions, lack of ATC, or the necessity of low-level flight. For an aircraft without icing protection, the safest overall course of action is to plan an IFR flight in the airway, with a contingency plan that provides a safe alternative course of action if icing conditions are indeed encountered.

To adopt a regulation that prohibits flight when even a possibility of icing exists encourages the adoption of higher risk strategies and leads to an overall degradation of safety.

Response

The proposal is expressing good airmanship but its detail is not felt appropriate in an essential requirement.

Text not changed.

2.f

Paragraph

Cmt. *20 / CAA Belgium*

Comment

2.f For a flight based on visual flight rules, meteorological conditions along the route to be flown must be such as to render compliance with these flight rules possible. For a flight based on instrument flight rules a destination and/or alternate aerodrome(s) where the aircraft can land must be selected, taking into account in particular the forecasted meteorological conditions, the availability of air navigation equipment, the availability of ground facilities and the instrument flight procedures approved and published by the State in which the destination and/or alternate aerodrome is located.

Proposed text:
Replace “aerodrome” with “take-off/landing site” unless IFR flights are only to be authorised to and from aerodromes.

Reason

JUSTIFICATION:

aerodrome is not suitable for helicopter, balloons etc

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. *318 / British Airways Plc*

Comment

British Airways proposes Paragraph 2f is amended to read:
“For a flight based on visual flight rules, meteorological conditions along the route to be flown must be such as to render compliance with these flight rules possible. For a flight based on instrument flight rules a destination and/or alternate aerodrome(s) where the aircraft can land must be selected, taking into account in particular the forecasted meteorological conditions, the availability of air navigation equipment, the availability of ground facilities and the instrument flight procedures approved and or published by the State in which the destination and/or alternate aerodrome is located.

Reason

A State published procedure is de-facto approved. Nevertheless some approved procedures are not published in a State’s AIP due to their restricted use.

Airlines in reality have no means to check the approval status, but it is de facto done when they are published by the State.

Response

Comment accepted.

Text changed.

Cmt. ***339 / European Helicopter Association (EHA)***

Comment

insert the word „heliport“ after aerodromes with a slash, affected paragraphs
2f (2x)

Reason

Editorial
For clarification refer to ICAO Annex-14 which has an Aerodrome Part as well as a Heliport Part

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. ***409 / AEA***

Comment

The AEA proposes to amend Paragraph 2f to read as:
“For a flight based on visual flight rules, meteorological conditions along the route to be flown must be such as to render compliance with these flight rules possible. For a flight based on instrument flight rules a destination and/or alternate aerodrome(s) where the aircraft can land must be selected, taking into account in particular the forecasted meteorological conditions, the availability of air navigation equipment, the availability of ground facilities and the instrument flight procedures approved and or published by the State in which the destination and/or alternate aerodrome is located.

Reason

A published procedure is de-facto approved. Nevertheless some approved procedures are not published due to their restricted use.

Airlines have, generally speaking, no means to check the approval status, but it is de facto done when they are published.

Response

Comment accepted.

Text changed.

Cmt. ***528 / IFALDA***

Comment

2.f For a flight based on visual flight rules, meteorological conditions along the route to be flown must be such as to render compliance with these flight rules possible. For a flight based on instrument flight rules a destination and/or alternate aerodrome(s) where the aircraft can land must be selected, taking into account in particular the forecasted meteorological conditions, the availability of air navigation equipment, the availability of ground facilities and the instrument flight procedures approved and published by the State in which the destination and/or alternate aerodrome is located. The pilot in –command and the flight dispatcher, shall both ensure that these conditions are complied with. They shall certify this by each signing the Flight Dispatch Release as set forth in “2” above.

Reason

The flight dispatcher serves to support the pilot-in-command and make sure that all factors are considered for a safe operation. It also removes some of the workload from the pilot and allows the flight dispatcher to provide the pilot with a thorough briefing, with a comprehensive consideration of all factors. At present, many flight crews are left on their own and under pressure do not have the time or the support to do this properly. Accidents/incidents have occurred for this very reason. By having the pilot-in-command and the flight dispatcher sign a Flight Dispatch Release ensures that all factors are considered.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***716 / SNPL / French ALPA***

Comment

2.f…n°5 line
(add) …ground facilities, performance of the aircraft and…

Reason

obvious

Response

Covered through paragraph 2.c, 4th and 6th bullet.

Text not changed.

Cmt. ***793 / Airbus***

Comment

For a flight based on visual flight rules, the available meteorological information indicate that the meteorological conditions along the route to be flown must will, at the appropriate time, be such as to render compliance with these flight rules possible. For a flight based on instrument flight rules a destination and/or alternate aerodrome(s) must be have been selected, taking into account (…)

Reason

Clarification.

Replace 1st “must be” by “will be”, and 2nd “must be” by “have been” [chapter 2 construction: a flight must not be commenced unless it has been ascertained (…) that ? paragraphs 2.a through 2.h indicative mood without “must”].

Response

These requirements are part of the flight preparation and therfore "must be" is justified.

Text not changed.

Cmt. ***1147 / ECA***

Comment

Please add the bolded text after the word: ‘ground facilities, aircraft performance and…

Reason

For safety reasons, the pilot must be familiar with the performance capabilites of the aircraft before selecting a landing destination.

Response

Covered trhough paragraph 2.c, 4th and 6th bullet.

Text not changed.

Cmt. ***1189 / LFV Sweden***

Comment

1. Change "and/or" to "and where applicable...". Furthermore, change "forecasted" to "expected".
2. Change “forecasted” to “expected.”
3. Delete "or" at the end of the para.

Reason

1. Alternates are not always required.
2. Forecasts are not always necessary.
3. "Or" is irrelevant since a destination is always specified.

Response

Comment partially accepted.

The essential requirements will be too detailed when covering every possible situation.

Text changed.

Cmt. ***1435 / Helicopter Club of Great Britain***

Comment

This rule should not require advance knowledge of the meterological conditions of every kilometer of every flight. It should simply require pilots to maintain visual flight rules during the flight.

Reason

To avoid a narrow interpretation of the rule. It is not possible to know in advance if every kilometer of the flight will satisfy visual flight rules. The pilot should re required to maintain visual flight rules conditions. If meterological conditions are such that this is not possible, then the pilot must turn back, divert or land.

Response

It is not the intent of this paragraph, nor of its wording to "require advance knowledge of the meterological conditions of every kilometer of every flight".

Text not changed.

Cmt. ***1461 / J. Miller***

Comment

2f This should refer to "predicted" met conditions for VFR flight. Sometimes the flight must change to IFR from VFR.

Reason

Response

For flight preparation the necessary meterological conditions must be assured.

Text not changed.

Cmt. ***1587 / DGAC***

Comment

Modifier le paragraphe comme suit :
« Pour les vols reposant sur des règles de vol à vue, les conditions météorologiques sur le parcours doivent être telles qu'elles permettent de respecter ces règles de vol. Pour un vol reposant sur des règles de vol aux instruments, il est nécessaire de choisir une destination et/ou un (des) aérodrome(s) de dégagement où l'aéronef peut atterrir, en tenant notamment compte des conditions météorologiques prévues, de l'existence d'équipement et d'installations de navigation aérienne, de l'existence d'installations au sol et de procédures de vol aux instruments approuvées et diffusées par l'État où se trouve l'aérodrome de destination et/ou de dégagement.»

Reason

Avec les moyens de navigation par satellite le terme d'installation au sol est sans doute trop restrictif.
L'annexe 6 (1ère partie, 4.4.8.2 et 2ème partie, 4.16.2) ne fait pas référence à la diffusion des procédures de vol aux instruments. Un exploitant peut faire approuver une procédure particulière qui ne sera pas nécessairement diffusée.

Response

1. Ground facilities can include, for example, fire fighting facilities. Comment not accepted.

2. Comment accepted. Text changed.

2.g

Paragraph

Cmt. ***226 / CAA, UK***

Comment

The last sentence of this paragraph should be deleted.

According to the explanatory note, this draft ER "mirrors" ICAO Annex 6 Standards such as Part II, 4.8 but the last sentence introduces an element that appears to relate to commercial air transport (CAT) operations only, i.e. "Procedures for in-flight fuel management must be established." Accepting the proposition (see Consultation document, question 14c) that these ERs should be applicable to all general aviation, it is considered inappropriate to require procedures to be established as if all these flights were for the purpose of CAT.

Reason

It is inappropriate to require commercial air transport operating procedures to be applied to all flights. Requirements that are specific to flights for particular purposes should be addressed in appropriate implementing rules.

Response

Comment partially accepted.

Text changed.

Cmt. ***319 / British Airways Plc***

Comment

British Airways proposes an amendment to paragraph 2g by deleting 'for contingencies':

Reason

Editorial

Response

Comment noted. The word contingency is the justification for carrying a reserve.

Text not changed.

Cmt. ***410 / AEA***

Comment

The AEA proposes to amend the paragraph 2g deleting 'for contingencies':

Reason

Editorial

Response

Comment noted. The word contingency is the justification for carrying a reserve.

Text not changed.

Cmt. ***477 / ERA***

Comment

2.g The amount of fuel and oil on board must be sufficient to ensure that the intended flight can be completed safely, taking into account the meteorological conditions, any element affecting the performance of the aircraft and any delays that are expected in flight. In addition, a reserve of fuel must be carried to provide for contingencies. Procedures for in-flight fuel management must be established.

Reason

Carriage of reserve oil is not necessary; it can not be topped-up in-flight!

Response

Comment accepted.

Text changed.

Cmt. ***529 / IFALDA***

Comment

2.g The amount of fuel and oil on board must be sufficient to ensure that the intended flight can be completed safely, taking into account the meteorological conditions, any element affecting the performance of the aircraft and any delays that are expected in flight. In addition, a reserve must be carried to provide for contingencies. Procedures for in-flight fuel managemen must be established. These amounts must be defined in the Flight Dispatch Release in (2) above. If either the pilot-in-comman or the flight dispatcher believes that a fuel issue exists, the one that believes this must communicate this belief to the other and review the situation and they both must agree on the appropriate amount to be carried.

Reason

This requirement should relate to the Flight Dispatch Release as suggested in requirement 2, which would ensure that this fuel amount is carried. This is a problem which has been the cause of a number of incidents and accidents, with fuel emergencies, fuel exhaustion and aircraft losses. The Dispatch Release ensures that these fuel requirements are planned properly by the pilot-in-command and the flight dispatcher and that all fuel requirements are complied with.

See Attachment.

Attachment ER 2.g.

This requirement should relate to the Flight Dispatch Release as suggested in requirement 2, which would ensure that this fuel amount is carried. This is a problem which has been the cause of a number of incidents and accidents, with fuel emergencies, fuel exhaustion and aircraft losses as noted here:

- Maersk Air B737, Billund, Denmark, December 1999, encountered severe weather, had outdated weather information, destination and alternates closed; fuel emergency.
- Hapag-Lloyd A310, Vienna, July, 2000, experienced aircraft system failure (landing gear unable to retract), flight continued, misjudgement by crew, and poor support by the company, fuel exhaustion, aircraft destroyed.
- Swiss SAAB 2000 Berlin, July, 2002, encountered severe weather, destination and alternates closed, fuel exhaustion, aircraft destroyed.
- SAS A330, Helsinki, October, 2003, continued with no holding fuel into low visibility/missed approach at destination, insufficient fuel for alternate; fuel emergency.

The Dispatch Release ensures that these fuel requirements are planned properly by the pilot-in-command and the flight dispatcher and that all fuel requirements are complied with. There have been many cases where flight dispatchers prevented less fuel from being carried when they judged that it would be a threat to safety. In addition, the flight should be monitored by both the pilot-in-command and the flight dispatcher regarding fuel consumption and management to ensure that it does not ge into a situation where it becomes an emergency or worse. By requiring either of them to contact the other when they believe that a fuel issue exists, this will go far to prevent more fuel emergencies before they occur.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***794 / Airbus***

Comment

The amount of fuel and oil on board must be is sufficient (…) Procedures for in-flight fuel management must be established.

Reason

Replace “must be” by “is” [chapter 2 construction: a flight must not be commenced unless it has been ascertained (…) that ? paragraphs 2.a through 2.h indicative mood without “must”].

In-flight fuel management is not relevant to chapter 2 – Flight preparation. It should be addressed in chapter 3 – Operations. See our proposal for a new paragraph in chapter 3.

Response

These requirements are part of the flight preparation and therefore "must be" is justified.

Text not changed.

Cmt. ***1190 / LFV Sweden***

Comment

Insert "expected" meteorological...etc.

Reason

This refers to the planning stage.

Response

"Expected" at the end of the sentence refers also to meterological conditions.

Text not changed.

Cmt. ***1461 / J. Miller***

Comment

2g In the case of a recreational sport aircraft, the procedures for in flight fuel management may be met by a fuel check in the vital actions check before takeoff and regular fuel checks as part of a regular cruise check, for example, a FREDA (fuel, radios, engine, DI, altimeter) check.

Reason

Response

Comment accepted.

Text changed but not as proposed.

2.h

Paragraph

Cmt. ***320 / British Airways Plc***

Comment

British Airways suggests that paragraph 2h (“Oxygen must be available to crew members and passengers, in such a way that it can be properly used by them and in sufficient quantities for all phases during that flight where a lack of oxygen might result in impairment of crew members or harmfully affect passengers”) is amended to read “For all phases of flight where a lack of oxygen might result in impairment of crew members or harmfully affect passengers, oxygen must be available to crew members and passengers, in such a way that it can be properly used by them”)

Reason

This new text permits not mandating oxygen carriage for all flights if it is not required.

Response

Comment accepted.

Paragraph deleted.

Cmt. ***411 / AEA***

Comment

The AEA proposes to rewrite paragraph 2h ("Oxygen must be available to crew members and passengers, in such a way that it can be properly used by them and in sufficient quantities for all phases during that flight where a lack of oxygen might result in impairment of crew members or harmfully affect passengers") to read as "For all phases of flight where a lack of oxygen might result in impairment of crew members or harmfully affect passengers, oxygen must be available to crew members and passengers, in such a way that it can be properly used by them")

Reason

This new writing allows not to mandate oxygen carriage for all flights if not needed

Response

Comment accepted.

Paragraph deleted.

Cmt. ***795 / Airbus***

Comment

Delete this paragraph.

Reason

This paragraph is redundant. Oxygen supply is part of the equipment required in paragraph 5.b. In addition paragraph 2.c requires that the commander be satisfied that all instruments and equipment as specified in chapter 5 (…) are installed in the aircraft and are operative.

Response

Comment accepted.

Paragraph deleted.

Cmt. ***1436 / Helicopter Club of Great Britain***

Comment

This rule should state that oxygen must be available for flight above 12,500 feet amsl.

Reason

To avoid a narrow interpretation of this rule. As written it could require every flight, even at low level, to carry oxygen just in case a passenger should need it for any reason. This would be unreasonable.

Response

Comment noted.

Paragraph has been deleted.

3.a

Paragraph

Cmt. ***797 / Airbus***

Comment

Delete the first sentence:

During flight, all the following conditions must be complied with.

Reason

This sentence is redundant. When you read paragraphs 3.a through 3.h, it is obvious that each one is mandatory.

Response

Comment accepted.

Text changed.

Cmt. *800 / Airbus*

Comment

Add a new paragraph:

3.i The commander must ensure that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to an aerodrome where a safe landing can be made.

Reason

We proposed to remove in-flight fuel management from paragraph 2.g, as chapter 2 is related to flight preparation. Chapter 3 is the right place for this requirement.

There is no need to specifically require a procedure for in-flight fuel management, as was proposed in paragraph 2.g. The inten is covered by paragraph 1.b.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1364 / Civil Aviation Administration FINLAND*

Comment

Add:
3.i As required in the Implementing Rules (IRs) and the Operations Manual (OM) after the flight all required flight documents shall be filed for the time required.

Reason

ICAO Annex 6 standard requirements.

Response

Proposal is too specific for an essential requirement.

Text not changed.

Paragraph

Cmt. *21 / CAA Belgium*

Comment

3.a During take-off and landing, and whenever deemed necessary by the pilot in command in the interest of safety, each crew member must be seated at their crew station and must use the provided restraint systems.

comment
This text is not suitable for UAVs .
This text is not suitable for balloons

Proposed text:
Place at the end a list of requirements not applicable to UAVs
Place at the end a list of requirements not applicable to Balloons

Reason

JUSTIFICATION:

nor seats nor restraint system are available in balloons.
Unless cabin crew (and passengers) are transported by UAVs, it is not applicable

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *476 / ERA*

Comment

3.b All flight crew members required to be on flight deck duty must be and remain at their station, with their seatbelts fastened except on route for physiological or operational needs.

Reason

This is covered in 3.a, and it is also effectively part of an IR – too specific for an ER.

Response

Paragraph 3.a deals with crew member in general, paragraph 3.b with flight crew members.

Text not changed.

3.b

Paragraph

Cmt. ***22 / CAA Belgium***

Comment

3.b All flight crew members required to be on flight deck duty must be and remain at their station, with their seatbelts fastened except on route for physiological or operational needs.

Comment
This text is not suitable for UAVs .
This text is not suitable for balloons

Proposed text:
Add specifically for UAVs
3.b.bis All “UAV flight crew members” required to be on UAV control duty must be and remain at their station, except for physiological needs while the UAV is on route. Where the control station is on board a moving platform , the UAV flight crew members will have their seatbelts fastened when seated.

Place at the end a list of requirements not applicable to Balloons

Reason

JUSTIFICATION:
Control station of an UAV must be permanently manned at least for liability reasons.
nor seats nor seatbelts are available in balloons.

Response

The vocabulary "required" provides the appropiate flexibility.

Text not changed.

Cmt. ***1438 / Helicopter Club of Great Britain***

Comment

This rule should state “….except en-route…” not on route

Reason

Incorrect wording

Response

Comment accepted.

Text changed.

Cmt. ***1582 / Estonian CAA***

Comment

Amend as follows: “At least one of the pilots on duty must be at all times fully aware of the situation on board, outside environment, and progress of the flight”.

Reason

Maintaining proper vigilance seems to be an essential requirement for conducting operations in safe manner.

Response

Comment noted. Should be adressed in the implementing rule.

Text not changed.

3.c

Paragraph

Cmt. *23 / CAA Belgium*

Comment

3.c Before take-off and landing, during taxiing, during flight turbulence and whenever deemed necessary in the interest of safety, the pilot in command must ensure that each passenger occupies a seat with the safety belt properly secured.

comment
Not suitable for Balloons
Unless people are carried on board UAVs, not suitable for UAVs. How can a “pilot in command” on the elsewhere “ensure” that passengers do what they are told to, unless there is a cabin crew on board?

Proposed text:
Place at the end a list of requirements not applicable to UAVs
Place at the end a list of requirements not applicable to Balloons

Reason

JUSTIFICATION:

nor seats nor restraint system are available in balloons.
Unless passengers (with cabin crew) are transported by UAVs, it is not applicable

Response

Comment accepted.

Text changed.

Cmt. *227 / CAA, UK*

Comment

This is drafted in terms that are not sufficiently general to allow for circumstances when passengers are carried other than in a seat with a safety belt, e.g. air ambulance and parachuting operations. The inclusion of an express reference to turbulence in the ER would make it illegal not to wear a seat belt even during 'light chop' - the wearing of restraints during turbulence is in any case covered by "whenever deemed necessary in the interest of safety". Suggest instead -

Before take-off and landing, and during taxying, and whenever deemed necessary in the interest of safety, the pilot-in-command must ensure that each passenger occupies a designated seat or berth with the safety belt, or harness where provided, properly secured.

Reason

This makes due allowance for circumstances where it is permissible for passengers to be carried other than in a seat.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *321 / British Airways Plc*

Comment

British Airways suggest the words “turbulence and” are deleted from paragraph 3c which would then state: “Before take-off and landing, during taxying, during flight turbulence and whenever deemed necessary in the interest of safety, the pilot in command must ensure that each passenger occupies a seat with the safety belt properly secured

Reason

The suggested wording permits the pilot in command to take all reasons (including turbulence) into account when deciding to require fastening of seat belts. In reality turbulence can be very light and can last a very short period of time. It is more practical to rely on the pilot in command’s analysis and experience than to be overly prescriptive in the essential requirement.

Response

Comment accepted.

Text changed.

Cmt. ***412 / AEA***

Comment

The AEA proposes to delete “turbulence and” from paragraph 3c to read as “Before take-off and landing, during taxying, during flight turbulence and whenever deemed necessary in the interest of safety, the pilot in command must ensure that each passenger occupies a seat with the safety belt properly secured

Reason

This amended wording allows the pilot in command to take all reasons (including turbulence) into account when deciding to require to fasten seat belts. The turbulence can be very light and can last a very short period of time. It is better to rely on pilo analysis and experience in order to request passenger to fasten their seat belt.

Response

Comment accepted.

Text changed.

Cmt. ***798 / Airbus***

Comment

Before take-off and landing, during taxying, and during flight turbulence and whenever deemed necessary in the interest of safety, the pilot in command commander must ensure that each passenger occupies a seat with the safety belt properly secure

Reason

This amended wording allows the commander to take all reasons (including turbulence) into account when deciding to require to fasten seat belts. The turbulence can be very light and can last a very short period of time. It is better to rely on pilot analysis and experience in order to request passenger to fasten their seat belt.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1117 / ECOGAS***

Comment

may be difficult in the case of a disruptive passenger? “... as far as is reasonably possible..”?

Reason

Response

Refer to paragraph 3.g.

Text changed but not as proposed.

Cmt. ***1191 / LFV Sweden***

Comment

Delete "flight".

Reason

Where else can turbulence be encountered?

Response

Comment noted.

Text changed but not as proposed.

Cmt. *1588 / DGAC*

Comment

Modifier le paragraphe comme suit :
« Avant le décollage et l'atterrissage, pendant le roulage, pendant les turbulences et chaque fois que cela est jugé nécessaire dans l'intérêt de la sécurité, le commandant de bord doit s'assurer que chaque passager occupe un siège, ceinture de sécurité est correctement attachée maintenu..»

Reason

Les actions à prendre en cas de turbulences peuvent varier en fonction de la nature de la turbulence (voir exemple ci-joint). Ce détail devrait être réglé dans les règles de mise en œuvre.
Le texte proposé ne prend pas en compte le cas des parachutistes, des bébés et des ballons, qui ne disposent pas nécessairement d'un siège ou d'une ceinture.

Response

Comment accepted.

Text changed but not as proposed.

3.d

Paragraph

Cmt. *228 / CAA, UK*

Comment

The general requirement being addressed here is to avoid collisions. The concept of maintaining "separation" relates to procedures used e.g. in controlled airspace and it is not relevant to operations outside controlled airspace. Suggest instead -

All possible measures must be taken to ensure that the aircraft does not collide with any other aircraft and that adequate obstacle clearance is ensured, during all phases of flight, as required by the applicable rules of the air.

Reason

It is inappropriate to require controlled airspace procedures to be applied outside controlled airspace.

Response

Even in VFR, one must insure a certain separation in order to avoid collision. Furthermore, it is said that this be in line with the applicable rules of the air.

Text changed but not as proposed.

Cmt. *475 / ERA*

Comment

3.d A flight must be performed in such a way that separation from
other aircraft is maintained and that adequate obstacle
clearance is ensured insured, during all phases of the flight, as required
by the applicable rules of the air.

Reason

Wrong word used.

Response

Comment accepted.

Text changed.

Cmt. ***530 / IFALDA***

Comment

3.d A flight must be performed in such a way that separation from other aircraft is maintained and that adequate obstacle clearance is insured, during all phases of the flight, as required by the applicable rules of the air. The air carrier shall be able t track the position of each flight while the flight is enroute.

Reason

This provision would provide for the use of flight monitoring by the air carrier to prevent the aircraft from deviating into a hazardous terrain, hazardous weather area area. Traffic separation would of course remain the function of air traffic control. By tracking the flight this also allows the flight dispatcher to provide important safety data to the flight while it is enroute.

One system for tracking flights accurately is the ASD, or Aircraft Situation Display. It is used in North America and has proved to be an excellent tool for flight dispatchers to route flights around severe weather and ATC bottlenecks.

This is also critical for security issues. Every air carrier should know where their flights are at any given time in case of a security threat.

At present, most flights in Europe are neither tracked nor provided with information by the air carrier. This is simply not acceptable.

Response

It is not the intention of these essential requirements to mandate the use of special equipment. The ultimate responsibility for the aircraft and its passengers lies with the PiC.

Text not changed.

Cmt. ***577 / EASA/Technical Committee***

Comment

This essential requirement, although very broadly written, is a very essential requirement indeed. When applied and developed properly in implementing rules (e.g. for ACAS, TAWS, etc.), it is a major lifesaver.

Reason

Response

Comment noted.

Cmt. ***904 / European Gliding Union***

Comment

EGU suggests adding the word “adequate” in front of “separation”.

Reason

Gliders often fly in the same thermals, close to each other. The regulation should not prevent them to do so.

Response

Comment noted.

Text changed but not as proposed.

Cmt. ***1118 / ECOGAS***

Comment

Split responsibility - pilot does not always know of other a/c and cannot ensure separation.

Reason

Response

This is a responsibility of the PiC to the most possible extent.

Text not changed.

Cmt. *1192 / LFV Sweden*

Comment

Delete “as required”.

Reason

This requirement is not only related to the Rules of the air.

Response

Comment accepted.

Text changed.

Cmt. *1227 / British Gliding Association*

Comment

The BGA suggests adding the word “adequate” in front of “separation”.

Reason

Gliders often fly in the same thermals, close to each other. The regulation should not prevent them doing so.

Response

Comment noted.

Text changed but not as proposed.

Cmt. *1589 / DGAC*

Comment

Modifier le paragraphe comme suit :
« Un vol doit être effectué de telle sorte qu'une distance soit maintenue par rapport aux autres aéronefs et qu'une hauteur adaptée de franchissement d'obstacle soit assurée pendant toutes les phases du vol tel qu'exigé par les conformément aux règles de l'air applicables..»

Reason

Si la séparation avec les autres aéronefs et les marges par rapport aux obstacles ne sont envisagées que dans le cadre du respect des règles de l’air, autant y faire une simple référence, d’autant que celles-ci peuvent contenir d’autres dispositions auxquelles il convient de se conformer.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text changed but not as proposed.

3.e

Paragraph

Cmt. *24 / CAA Belgium*

Comment

3.e A flight must not be continued unless known meteorological conditions continue to be those specified in point 2.f. Furthermore, for a flight based on instrument flight rules, an approach toward an aerodrome must not be continued below certain heights specified by the competent authority, if minimum visibility criteria are not met.
2. PROPOSED TEXT/ COMMENT:
Proposed text:
Replace “aerodrome” with “take-off/landing site” unless IFR flights are only to be authorised to and from aerodromes.

Reason

JUSTIFICATION:

aerodrome is not suitable for helicopter, balloons etc

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. *25 / CAA Belgium*

Comment

3.e A flight must not be continued unless known meteorological conditions continue to be those specified in point 2.f. Furthermore, for a flight based on instrument flight rules, an approach toward an aerodrome must not be continued below certain heights specified by the competent authority, if minimum visibility criteria are not met.

proposed text :
[…]Furthermore, for a flight based on instrument flight rules, an approach toward an aerodrome must not be continued below certain heights specified by the competent authority, if applicable minimum visibility criteria are not met.

Reason

JUSTIFICATION:

applicable minimum visibility criteria depends of the landing aid available, of the serviceable equipment on board (CAT II, CAT III) etc.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *26 / CAA Belgium*

Comment

3.e A flight must not be continued unless known meteorological conditions continue to be those specified in point 2.f. Furthermore, for a flight based on instrument flight rules, an approach toward an aerodrome must not be continued below certain heights specified by the competent authority, if minimum visibility criteria are not met.

proposed text :
add:
For UAVs, an approach toward a landing site must not be continued below certain heights specified by the competent authority, when the required landing aid is inoperative or when the required site procedures for aided landing are not in force. (e.g. protection area of the ILS)

Reason

JUSTIFICATION:

Visibility is not relevant for UAVs performing automatic landing

Response

This is a basic problem for UAVs as one of the first rules of the air is see and be seen. The need for specific implementing rules for UAVs is foreseen.

Text not changed.

Cmt. *322 / British Airways Plc*

Comment

British Airways recommends separate paragraphs regarding IFR and VFR flights (1).

British Airways requests a definition of the term 'Competent Authority'.

Is the instrument part intended to define the approach ban or for compliance with aerodrome operating minima?

Reason

(1) Consistency with paragraph 2f
(2) Clarification

Response

Paragraphs 2.f and 3.e both address VFR and IFR. Text not changed.

Comment accepted. Text changed but not as proposed.

Approach ban is linked to aerodrome operating minima.

Cmt. *339 / European Helicopter Association (EHA)*

Comment

insert the word „heliport" after aerodromes with a slash, affected paragraphs
3e

Reason

Editorial
For clarification refer to ICAO Annex-14 which has an Aerodrome Part as well as a Heliport Part

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. ***413 / AEA***

Comment

The AEA recommends to split this paragraph in IFR and VFR flights (1) .

The AEA requests to define what is meant with Competent Authority.

Is the instrument part intended to define the approach ban or for compliance with aerodrome operating minima?

Reason

(1) Consistency with paragraph 2f
(2) Clarification

Response

Paragraphs 2.f and 3.e both address VFR and IFR. Text not changed.

Comment accepted. Text changed but not as proposed.

Approach ban is linked to aerodrome operating minima.

Cmt. ***531 / IFALDA***

Comment

3.e A flight must not be continued unless known meteorological conditions continue to be those specified in point 2.f. Furthermore, for a flight based on instrument flight rules, an approach toward an aerodrome must not be continued below certain heights specified by the competent authority, if minimum visibility criteria are not met.

3.e.1 Under Instrument Flight Rules, both the pilot-in-command and the flight dispatcher shall monitor the meteorological conditions and each shall advise the other in the event that according to a combination of reports or forecasts minimum visibility and/or ceilings will not be available at the intended aerodrome.

Reason

One reason there have been serious incidents and accidents in Europe is that pilots have continued into severe/poor weather conditions and then run out of fuel, with no legal alternates available. By having the flight dispatcher responsible for weather monitoring this problem can be mitigated. Also, having both the pilot-in-command and the flight dispatcher responsible for weather, they both can check each other and the pilot will then have the best information possible. The pilot-in-command and the flight dispatcher can then work together as a team to ensure a safe outcome, even in the face of severe weather.

See Attachment.

Attachment ER 3.e.

One reason there have been serious incidents and accidents in Europe is that pilots have continued into severe/poor weather conditions and/or then run out of fuel, with no legal alternates available as follows:

- Maersk Air B737, Billund, Denmark, December 1999, encountered severe weather, had outdated weather information, destination and alternates closed; fuel emergency.
- Swiss SAAB 2000 Berlin, July 2002, encountered severe weather, destination and alternates closed, fuel exhaustion, aircraft destroyed.
- BMI A321, Over Germany, May, 2003, encountered severe weather/ hail, serious damage, aircraft continued for hundreds of kilometers before landing.
- EasyJet B737 Geneva, August, 2003, encountered severe weather/hail, serious damage.
- SAS A330, Helsinki, October, 2003, continued with no holding fuel into low visibility/missed approach at destination, insufficient fuel for alternate; fuel emergency.

By having the flight dispatcher responsible for weather monitoring this problem can be mitigated. Also, having both the pilot-in-command and the flight dispatcher responsible for weather, they both can check each other and the pilot will then have the best information possible. The pilot-in-command and the flight dispatcher can then work together as a team to ensure a safe outcome, even in the face of severe weather.

This happens routinely in countries which have a full dispatch system. Pilots are advised when their destinations go below minimums by the dispatcher and they make a decision together about whether they can hold, reroute, go to an alternate or even stop short. This is especially valuable as the dynamic operational picture is changing constantly while a flight is enroute.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***578 / EASA/Technical Committee***

Comment

Refers to “those specified in 2f”. However, point 2f does not specify anything, it merely says that meteorological conditions be considered.

Reason

Response

Comment accepted.

Text changed.

Cmt. ***799 / Airbus***

Comment

2nd sentence:

Furthermore, for a flight based on instrument flight rules, an approach toward an aerodrome must not be continued below certain specified heights specified by the competent authority, if minimum visibility criteria are not met.

Reason

The essential requirements are meant to describe, in general terms, the means to mitigate possible hazards to flight safety. They are not meant to define who specifies what. Implementing rules will define the respective duties of the Agency, the competent Authorities and operators.

Response

Comment accepted.

Text changed.

Cmt. ***1193 / LFV Sweden***

Comment

1. Insert the following: "...unless known meteorological conditions are such that a safe landing can be made at the destination arerodrome or one alternative aerodrome. Furthermore ... , an approach towards an aerodrome must ..."
2. Insert the following : "... heights or beyond a certain position specified by ..."
3. Change “minimum” to "prescribed".

Reason

1. The criteria for actual flight execution are to landing minima, not planning minima (para 2.f refers to planning).
2. Rules are different in this respect.
3. “Minimum” is too vague.

Response

The first sentence in paragraph 3. e covers both IFR and VFR.

Comment accepted.

Text changed.

Cmt. ***1590 / DGAC***

Comment

Modifier le paragraphe comme suit :
« Un vol ne doit être poursuivi, que si les conditions météorologiques connues restent celles spécifiées au point 2.f. De plus, pour un vol aux instruments, l'approche vers un aérodrome ne doit pas être poursuivie en dessous de certains niveaux spécifiés par l'autorité compétente si les critères minimum de visibilité ne sont pas réunis...»

Reason

Les conditions météorologiques ne sont qu’une des raisons pouvant nécessiter un déroutement (fermeture aérodrome cause accident, fuite carburant, etc.)

Response

Comment accepted.

Text changed.

3.f

Paragraph

Cmt. *27 / CAA Belgium*

Comment

3.f In an emergency, the pilot in command must ensure that all passengers are instructed in such emergency action as may be appropriate to the circumstances.

Comment:
Passenger transport by UAVs would need Cabin crew. The PIC being elsewhere, would not be able to judge the circumstances other than by report from the cabin crew.

Reason

Response

With regard to the current situation for UAV this comment does not apply.

Text not changed.

Cmt. *579 / EASA/Technical Committee*

Comment

In an emergency only? Too late!

Reason

Response

Paragraph 3.f has to be seen in combination with 2.b.

Text not changed.

Cmt. *720 / SNPL / French ALPA*

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for essential requirements.

Text not changed.

Cmt. *1531 / MOT/PW&WM NL*

Comment

delete the whole point.

The general responsibility of the pilot in command includes the responsibility to ensure information to the passengers and crew, as much as possible.
Details of the responsibility of the pilot in command should not be regulated at the level of essential requirements. If it is decided to keep this sentence it should be noted that in some emergency situations it is practically not possible to inform the passengers and crew… therefore addition of the words 'as much as possible' is necessary.

Reason

Response

The proposal is covered by the end of the sentence.

Text not changed.

Cmt. ***1591 / DGAC***

Comment

Modifier le paragraphe comme suit :
« En cas d'urgence, le commandant de bord doit s'assurer que tous les passagers ont été formés doivent être informés à une telle action d'urgence adaptée aux circonstances.»

Reason

Le terme de formation n'est pas adapté pour une information donnée aux passagers. Par ailleurs cette action n'est pas nécessairement assurée par le commandant de bord. En transport public, sur les aéronefs d'une certaine capacité, c'est notamment la responsabilité de l'équipage de cabine

Response

Text is in accordance with ICAO Annex 6 Part II.

Text not changed.

3.g

Paragraph

Cmt. ***28 / CAA Belgium***

Comment

3.g A pilot in command must take all necessary measures so as to minimise the consequences on the flight of disruptive passenger behaviour.

Comment:
Passenger transport by UAVs would need Cabin crew. The PIC being elsewhere, would not be able to judge the circumstances other than by report from the cabin crew.

Reason

Response

With regard to the current situation for UAV this comment does not apply.

Text not changed.

Cmt. ***323 / British Airways Plc***

Comment

British Airways suggest to delete paragraph 3g

Reason

This issue is already addressed by paragraph 1d which states 'The pilot in command must be responsible for the safety and operations of the aircraft and for the safety of all crew members, passengers and cargo on board' and also paragraph 7c which states 'The pilot in command must have Authority to give all commands and take any appropriate actions for the purpose of securing the safety of the aircraft and of persons or property carried therein'.

Response

Paragraph 3.d places the obligation to act on the PiC. Paragraph 7.c empowers the PiC to act.

Text not changed.

Cmt. ***414 / AEA***

Comment

The AEA suggest to delete paragraph 3g

Reason

This issue is already addressed by paragraph 1d which reads 'The pilot in command must be responsible for the safety and operations of the aircraft and for the safety of all crew members, passengers and cargo on board' and paragraph 7c which reads 'The pilot in command must have Authority to give all commands and take any appropriate actions for the purpose of securing the safety of the aircraft and of persons or property carried therein'

Response

Paragraph 3.d places the obligation to act on the PiC. Paragraph 7.c empowers the PiC to act.

Text not changed.

Cmt. *474 / ERA*

Comment

3.g A pilot in command The crew, as directed by the pilot in command must take all necessary measures so as to minimise the consequences on the flight of disruptive passenger behaviour.

Reason

Where cockpit doors are now closed and locked, the onus is on the cabin crew to take appropriate action; the flight crew may be “in the loop” via intercom, but the ability to minimize the consequences will depend on company training and State security procedures. Using “the crew” is a more realistic instruction; whereas putting all the onus on the captain is impractical; however, including the phrase “as directed” provides the legal requirement of responsibility.

Response

The PiC must take all measures wihich includes instructing the crew to act.

Text not changed.

Cmt. *532 / IFALDA*

Comment

3.g A pilot in command and the air carrier must take all necessary measures so as to minimise the consequences on the flight of disruptive passenger behaviour.

The pilot-in-command should not be left on their own with this. The air carrier should provide all possible assistance. The flight dispatcher should be the single point of contact for this and be able to bring all resources of the airline and law enforcement agencies together to help the pilot resolve the problem. In addition, if the flight must be stopped to deal with the disruptive passengers, it should be the flight dispatcher, in cooperation with law enforcement and management to work with the pilot in deciding where the flight should go. Sometimes law enforcement, for example, wants a flight in a particular airport, but this airport may not be suitable for a flight for performance, weather, or other operational reasons. The flight dispatcher would be knowledgeable about this.

Reason

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. *720 / SNPL / French ALPA*

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for essential requirements.

Text not changed.

3.h

Paragraph

Cmt. *29 / CAA Belgium*

Comment

3.h An aircraft must not be taxied on the movement area of an aerodrome, or its rotor must not be turned under power, unless the person at the controls is appropriately qualified.

proposed text:
3.h An aircraft must not be moved on the ground under its own power, or its rotor must not be turned under power, unless the person at the controls is appropriately qualified.

Reason

JUSTIFICATION:

There is no reason to limit this to the movement area of an aerodrome. Why not at the maintenance facility for example?
I assume towing is not taxiing and the trailer has adequate brakes

Response

These part applies only to flight operations.

Text not changed.

Cmt. *229 / CAA, UK*

Comment

This paragraph relates to taxying. The logical place for this would be at the beginning of the chapter.

Reason

An aircraft has to taxi before it can take off.

Response

The order of the text does not necessarily represent the chronological order or an order of priority.

Text not changed.

Cmt. *339 / European Helicopter Association (EHA)*

Comment

insert the word „heliport“ after aerodromes with a slash, affected paragraphs
3h

Reason

Editorial
For clarification refer to ICAO Annex-14 which has an Aerodrome Part as well as a Heliport Part

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. *473 / ERA*

Comment

3.h An aircraft must not be taxied on the movement area of an aerodrome, or its rotor must not be turned under power, unless the person at the controls is appropriately trained qualified.

Suggest that the word “qualified is replaced – or more suitable defined.

Reason

What is appropriately qualified? Do you mean JAR 66 licence; or some other specific qualification?
Licensed engineers are of course the people, other than flight crew, who regularly test aircraft “under power” – but only when they have been suitably trained to do so (and are supervised?)

Response

Essential Requirements should not specify certain qualifications.

Text not changed.

Cmt. *580 / EASA/Technical Committee*

Comment

If prevention of runway incursions is the aim here, then this requirements should be expanded to aircraft being towed, making it overlapping with aerodrome safety requirements.

Reason

Response

These part applies only to flight operations.

Text not changed.

Cmt. *1119 / ECOGAS*

Comment

“or supervised” eg in the case of student pilots.

Reason

Response

The PiC is always responsible in this case.

Text not changed.

Cmt. ***1194 / LFV Sweden***

Comment

Remove the text relating to helicopters.

Reason

Too detailed for ER.

Response

"Rotor … turned under power" is the equivalent in ICAO Annex 6 to taxying of airplanes.

Text not changed.

Cmt. ***1461 / J. Miller***

Comment

3h A recreational sport aircraft may be pushed around (without its own engine power being on) by trained non-pilots, for example, an airfield firemen regularly used to pushing such aircraft or an aircraft engineer. Such pushing may also be carried out for recreational sport aircraft by non-qualified persons under the supervision of and assisting a qualified pilot not strong enough to push the aircraft by himself, including passengers, by-standers and fuelling staff.

Reason

Response

This paragraph does not apply to moving of aircraft unless under own power.

Text not changed.

Cmt. ***1591 / DGAC***

Comment

Modifier le paragraphe comme suit :
« Un appareil ne doit pas rouler sur l'aire de mouvement d'un aérodrome ou son rotor ne doit pas être mis en rotation si la personne aux commandes n'a pas les qualifications requises n'est pas autorisée et compétente pour le faire.»

Reason

Le terme de qualification peut être trop restrictif et l'annexe 6 (2ème partie, 4.17) fait plutôt référence à une notion de compétence et d'autorisation.

Response

Comment accepted.

Text changed.

4.a

Paragraph

Cmt. ***30 / CAA Belgium***

Comment

4.a An aircraft must be operated in accordance with its airworthiness certification and all related operating procedures and limitations as expressed in its approved flight manual or operations manual, as the case may be. […]

proposed text:
4. Aircraft performance and operating limitations
4.a An aircraft must be operated in accordance with its airworthiness certification and all related operating procedures and limitations as expressed in its approved flight manual or operations manual, as the case may be [including ADs]. The flight manual must be available and kept up to date for each aircraft.

Reason

JUSTIFICATION:

text added for people unaware of what an AD implies

Response

Inserting applicable AD into the Flight Manual is part of keeping it up to date.

Text not changed.

Cmt. ***160 / RSA***

Comment

Annex 2 – 4 Aircraft performance and operating limitations paragraph 4a
An aircraft must be operated in accordance with its airworthiness certification and all related operating procedures and limitations as expressed in its approved flight manual or operations manual, as the case may be. The flight manual must be available and kept up to date for each aircraft.

COMMENT:
This paragraph is not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002
We propose to replace the text by :
"An aircraft must be operated in accordance with its airworthiness certification "

Reason

Amateur built and vintage aircraft are not subject to Type certification and in most of the case does not have a flight manual or an operation manual. The document used depends of the requirements implemented by National Aviation Authorities

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Text not changed.

Cmt. ***230 / CAA, UK***

Comment

According to the explanatory note, this draft ER is based on ICAO Standards such as Annex 6 Part II, 5.1(a). However it differs from ICAO in that it does not include the possibility of an "equivalent approved document". Whilst it is entirely proper to require that normal operations are conducted in accordance with the aircraft's airworthiness certification, this omission would preclude any flight by an aircraft that has no airworthiness certification; and would also render impossible any special provision e.g. for an overweight delivery flight. Provision should also be made for aircraft that do not have a flight manual (e.g. DH82A Tiger Moth). It is considered that it would be more appropriate if the obligation to maintain aircraft documents up to date were addressed elsewhere, e.g. in Implementing Rules. It is suggested that the text be amended and simplified in line with the ICAO Standards; thus -

An aircraft must be operated in accordance with its aircraft certification or equivalent approved document and all any related operating procedures and limitations as expressed in its approved flight manual or operations manual.

Reason

This makes the requirement more suitable for general application.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***324 / British Airways Plc***

Comment

4.a The last sentence "The flight manual must be available and kept up to date for each aircraft" should be deleted.

Reason

This is too detailed for Essential Requirements. Furthermore this would require to maintain one manual for each single aircraft which is too costly and unnecessary if all relevant information has been adopted in the Operations Manual.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. *415 / AEA*

Comment

4.a The last sentence “The flight manual must be available and kept up to date for each aircraft” should be deleted.

Reason

Too much detail for Essential Requirements. This would require to maintain one manual for each single aircraft which is too costly and unnecessary if all relevant information has been adopted in the Operations Manual.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. *472 / ERA*

Comment

4.a An aircraft must be operated in accordance with its airworthiness certification and all related operating procedures and limitations as expressed in its approved flight manual or operations manual, as the case may be. The flight manual, or equivalent document, must be available and kept up to date for each aircraft.

Reason

For some aircraft there is not an AFM, but the same information is contained in an alternatively approved document; it is the information that is important and not the name of the document. Similarly some operators are allowed to carry just an OM on board each aircraft, which contains the same information. Therefore the ER needs to reflect both of these scenarios by the inclusion of “or equivalent document”.

This is the case in JAR OPS 1.1050

Response

Comment accepted.

Text changed.

Cmt. *581 / EASA/Technical Committee*

Comment

“airworthiness certification” is a process, not a set of limitations, instructions and procedures. Replace by “Certificate of airworthiness”.

Reason

Response

Comment noted.

Text changed but not as proposed.

Cmt. *722 / SNPL / French ALPA*

Comment

4.a last sentence
The flight manual must be available on board and ...

Reason

Legitimity of harmonized regulation

Response

The approved flight manual may be substituted by an approved Flight Crew Operating Manual. Covered by paragraph 5.c.

Text not changed.

Cmt. ***801 / Airbus***

Comment

An aircraft must be operated in accordance with its airworthiness and environmental certification and all related procedures and limitations as expressed in its approved flight manual or operations manual, as the case may be. The flight manual must be available and kept up to date for each aircraft.

Reason

We propose to merge paragraphs 4.a (airworthiness) and 4.b (environmental), and to remove the detail considerations on fligh or operations manuals. The intent of these considerations is addressed in the essential requirements for airworthiness, paragraphs 1.c.4, 2.a.1, 2.a.5, and 2.b.

Response

Comment noted. The ER for Airworthiness regulate the TC Holder while the ER OPS regulate the owner/operator.

Text not changed.

Cmt. ***957 / RSA***

Comment

This paragraph is not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002
We propose to replace the text by :
“An aircraft must be operated in accordance with its airworthiness certification “

Reason

Amateur built and vintage aircraft are not subject to Type certification and in most of the case does not have a flight manual or an operation manual. The document used depends of the requirements implemented by National Aviation Authorities

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Text not changed.

Cmt. ***1148 / ECA***

Comment

Please add the following bolded words to the last line: ‘The flight manual must be available on board and …’

Reason

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1195 / LFV Sweden***

Comment

1. Insert the following : "... flight manual or an equivalent document and/or operations ...".
2. Change the last sentence as follows : "The flight manual or equivalent document must be kept up to date for each aircraft and be available onboard unless the same information is available onboard in the Operations Manual, where applicable."

Reason

1. Flight manuals are normally not available for smaller aeroplanes.
2. This will make the requirement more accurate and flexible. However, this requirement may be more suitable in the form of IRs.

Response

Comment partially accepted.

Text changed.

Cmt. *1406 / FAA USA*

Comment

Add underlined text:
"….and limitations as expressed in its approved flight manual or operations manual, as may be approved for specific use by the competent authority. The flight manual or operations manual when approved for use by the authority, must be available and kept up to date for each aircraft."

Reason

Response

Comment noted.

Text changed but not as proposed.

4.b

Paragraph

Cmt. *231 / CAA, UK*

Comment

According to the explanatory note, this draft ER is based on ICAO Standards such as Annex 6 Part II, 5.1(c). However it differs from ICAO in that it does not include the possibility of exemption from the noise certification requirements by a competent authority. In the UK for example, noise exemptions have been granted for microlight aeroplanes, powered hang-gliders and paragliders, agricultural helicopters, and on exceptional occasions for delivery flights. The ER should be amended to make provision for such authorizations to be made; thus -

The aircraft must be operated in accordance with the applicable environmental certification, unless otherwise authorized by the competent authority of the State concerned.

Reason

A balance has to be made between environmental needs and legitimate operations. This is considered to be a proper subject for the exercise of subsidiarity, as the circumstances will not always be the same.

Response

The vocabulary "applicable" provides the flexibility asked for.

Text changed but not as proposed.

Cmt. *582 / EASA/Technical Committee*

Comment

Same comment as for 4a

Reason

Response

Comment noted.

Text changed.

Cmt. *802 / Airbus*

Comment

Delete this paragraph.

Reason

This paragraph can be merged with paragraph 4.a: see our comment on paragraph 4.a.

Response

Comment noted. The ER for Airworthiness regulate the TC Holder while the ER OPS regulate the owner/operator.

Text changed but not as proposed.

4.c

Paragraph

Cmt. *31 / CAA Belgium*

Comment

4.c […] Performance factors which significantly affect take-off, en-route and approach /landing are, particularly:
- […]
- size, slope and condition of the take-off/ landing area;

[…].

proposed text:

4.c […] Performance factors which significantly affect take-off, en-route and approach /landing are, particularly:
- […]
- size, slope and condition [including movement] of the take-off/ landing area;

[…].

Reason

JUSTIFICATION:

This text is necessary for helideck on ships and floating platforms. Some floating airports are also under construction.

Response

This specific case could be better addressed in implementing rules. The existing wording covers the general case.

Text not changed.

Cmt. *216 / CAA, UK*

Comment

It should be clarified that 'obstacle clearance' should include terrain clearance as well. This is especially important for performance planning.

Reason

To provide clarity.

Response

It is implied that obstacle encompasses terrain. Further elaboration could be made at the implementing level.

Text not changed.

Cmt. *232 / CAA, UK*

Comment

This relates to aircraft performance. Last sentence: suggest change as follows -

Such factors must be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data, as required by appropriate to the type of operation.

Reason

This improves the meaning of the requirement.

Response

Comment accepted.

Text changed.

Cmt. *325 / British Airways Plc*

Comment

4.c. The second sentence should be amended to read: "Performance Factors which significantly affect take-off, en-route and approach/landing performance are: .... ".

Reason

"Performance factor" is a common term used in conjunction with Flight Management Systems, which is not intended in this context.

Response

The term "Performance factor" is a general term not exclusively used in Flight Management Systems vocabulary.

Text not changed.

Cmt. ***339 / European Helicopter Association (EHA)***

Comment

insert the word „heliport“ after aerodromes with a slash, affected paragraphs
4c

Reason

Editorial
For clarification refer to ICAO Annex-14 which has an Aerodrome Part as well as a Heliport Part

Response

Aerodrome is the ICAO vocabulary that covers all take-off and landing sites.

Text not changed.

Cmt. ***416 / AEA***

Comment

4.c. Second sentence should read: "Performance Factors which significantly affect take-off, en-route and approach/landing performance are: .... ".

Reason

"Performance factor" is a common term used in conjunction with Flight Management Systems which is not meant here.

Response

The term "Performance factor" is a general term not exclusively used in Flight Management Systems vocabulary.

Text not changed.

Cmt. ***471 / ERA***

Comment

4.c A flight must not be commenced unless the aircraft's scheduled performance, considering all factors which significantly affect its performance level, allows all phases of flight to be executed within the applicable distances/areas and obstacles clearances at the planned prevailing operating mass {or use – “at the appropriate planned operating mass}. Performance factors which significantly affect take-off, en-route and approach /landing are, particularly:

Reason

To clarify that the mass used for performance calculations is the mass at the time the performance is required (eg planned landing mass to calculate the landing performance). Just to avoid some lawyer confusing this with all performance calculated using the take-off mass!

Response

It is felt that the proposed addition to the text would not significantly clarify the issue. This will be the role of implementing rules.

Text not changed.

Cmt. ***533 / IFALDA***

Comment

Comment only: The flight dispatcher would of necessity have a role here in checking all performance parameters and weight limitations as these all affect the flight planning process. They would be doing this in support of the flight crew and in preparation of the Flight Dispatch Release.

Reason

Only a comment, not a change.

Response

Comment noted.

Cmt. ***803 / Airbus***

Comment

Simplify this paragraph and move it to chapter 2 – Flight preparation:

3.i A flight must not be commenced unless the The aircraft's scheduled performance, considering all factors which significantly affect its performance level, allows all phases of flight to be executed within the applicable distances/areas and obstacle clearances at the planned operating mass. Performance factors which significantly affect… as required by the type of operation (delete the end of the paragraph).

Reason

This paragraph is relevant to flight preparation.

The details of the factors to be considered should be addressed in the implementing rules or AMC/GM.

Response

When implementing paragraph 2.c, a pilot will necessarily be led to implement paragraph 4.c. It is therefore not felt necessary to transfer this paragraph. Furthermore the simplification proposed does not allow for legal certainty in some sectors.

Text not changed.

Cmt. ***1196 / LFV Sweden***

Comment

1. Change "planned" to "actual".
2. Change the wording in the second bullet to : "pressure altitude of the aerodrome".
3. The requirement in the sixth bullet appears to be difficult to fulfill and goes further than ICAO Annex 6; in particular regardning the wording "possible". As a minimum "possible" must be changed to "known".
4. Delete the text in the seventh bullet.

Reason

1. This relates to the decision to actually take-off, where the actual mass must be taken into account. Another option would be to omit "planned", which would make the text relevant for all phases of flight.
2. With reference to the definition of pressure altitude, the rest is superfluous.
3. -
4. It is clearly stated in the certification standards that the handing of an aircraft may not require exceptional skill.

Response

1. The mass can only be planned as this calculation takes place before the event itself. Text not changed.

2. Comment accepted. Text changed.

3. Comment accepted. Text changed.

4. Comment accepted. Text changed.

5.a

Paragraph

Cmt. ***32 / CAA Belgium***

Comment

5.a An aircraft must be equipped with all the necessary navigation, communication and other operational equipment necessary for the intended flight, taking account of applicable air traffic regulations and rules of the air applicable at any time during any phase of this flight. All required equipment must be in an operating condition.

proposed text:
Add:
In addition, for UAVs, the remote control station must be equipped with all the necessary navigation, communication and other operational equipment necessary for the control of the intended flight, taking account of applicable air traffic regulations and rules of the air applicable at any time during any phase of this flight. All required equipment must be in an operating condition

Reason

JUSTIFICATION:

self explanatory

Response

In the case of a aircraft the flight controls are not specifically mentioned. The same should apply for UAVs. The remote control station should be considered as being part of the aircraft.

Text not changed.

Cmt. ***233 / CAA, UK***

Comment

According to the explanatory note, this draft ER is based on ICAO Standards such as Annex 6 Part III, Section III, 4.1.1(a). However it differs from ICAO in that it does not make any explicit cross-reference to equipment that forms part of the type certification of the aircraft. The text, as drafted, appears somewhat unwieldy and does not make the necessary allowances for unserviceable equipment. Suggest instead -

In addition to the minimum equipment necessary for compliance with its aircraft certification or equivalent approved document, an aircraft must be equipped with navigation, communication and other operational equipment sufficient to enable the intended flight to be conducted safely and in accordance with applicable air traffic control requirements.

Reason

This clarifies the meaning and makes the requirement more suitable for general application and includes equipment required for: - AWOPS, ETOPS, RVSM, RNAV.

Response

Comment partially accepted.

Text clarified.

Cmt. ***458 / ERA***

Comment

Insert a reference to paragraph 5.a necessary nav, comm and op equipment.

The two ER's are connected; and a reference from one to the other will prevent one being overlooked.

Reason

Response

Comment accepted.

Title changed.

Cmt. ***470 / ERA***

Comment

5.a An aircraft must be equipped with appropriate all the necessary navigation, communication and other operational equipment necessary for the intended flight, taking account of applicable air traffic regulations and rules of the air applicable at any time during any phase of this flight. All required equipment must be in an operating condition at the time of departure, except where MEL conditions are met, or for certain authorized flights.

Reason

- "All the necessary" is an open-ended phrase; "appropriate" matches the equipage to the job in hand.
- There is no allowance for application of the MEL, and for certain specified flights such as aircraft delivery and transit to maintenance facility.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***534 / IFALDA***

Comment

Comment only: A flight dispatcher would also have a role here as it relates to Minimum Equipment List (MEL) items that may prevent the aircraft from operating. An MEL item could affect navigation, communication or other operational equipment which can determine whether the aircraft can even operate the flight, or if it does operate, with restrictions. This can require limitations on routes, altitudes or speed schedules. Since the flight dispatcher would be tasked with the flight planning function it is logical that they would have to know whether equipment is operational or not. By them doing this, they are supporting the flight crew and again ensuring the safest outcome. MELs should be considered when the flight dispatch release is prepared. The flight dispatcher's input has and could prevent the illegal dispatch of a flight,

Reason

Only a comment, not a change.

Response

Comment noted.

Cmt. *583 / EASA/Technical Committee*

Comment

The word “applicable” appears twice.

Reason

Response

Comment accepted.

Text changed.

Cmt. *584 / EASA/Technical Committee*

Comment

Add at the end: “except as provided for in the MEL or equivalent.”

Reason

Response

Comment accepted.

Sentence deleted.

Cmt. *683 / MOT Germany*

Comment

Add the following (underlined) wording at the end of the last sentence of paragraph 5.a to read as follows:

“All required equipment must be in a serviceable condition unless an allowable degradation and resulting limitations are otherwise specified .”

Reason

In chapter 5 a reference to allowable degradation of the equipment and the therefore necessary/possible limitations should be added, considering the points made in last paragraph of chapter 4.c. Without the proposed change above, the operator is forced to ground the aircraft in case of any malfunction. However, this is not in line with the Standards in ICAO Annex 6, Chapter 6.1.2, asking for the development of a MEL, allowing the operation of aircraft with un-serviceable equipment under specific circumstances. The proposed change covers the matter in general and harmonises paragraph 5.a with the text in paragraph 8.a.3, dealing with the development of the MEL.

Response

Comment accepted.

Sentence deleted.

Cmt. *717 / SNPL / French ALPA*

Comment

5.a at the end of the paragraph.
(add) Except as provided in a MEL subject to pilot in command acceptance.

Reason

Provision for MEL must be introduced

Response

Comment accepted.

Sentence deleted.

Cmt. ***821 / LBA***

Comment

Add the following (underlined) wording at the end of the last sentence of paragraph 5.a to read as follows:

"All required equipment must be in a serviceable condition unless an allowable degradation and resulting limitations are otherwise specified ."

Reason

In chapter 5 a reference to allowable degradation of the equipment and the therefore necessary/possible limitations should be added, considering the points made in last paragraph of chapter 4.c. Without the proposed change above, the operator is forced to ground the aircraft in case of any malfunction. However, this is not in line with the Standards in ICAO Annex 6, Chapter 6.1.2, asking for the development of a MEL, allowing the operation of aircraft with un-serviceable equipment under specific circumstances. The proposed change covers the matter in general and harmonises paragraph 5.a with the text in paragraph 8.a.3, dealing with the development of the MEL.

Response

Comment accepted.

Sentence deleted.

Cmt. ***864 / J. R. Jones***

Comment

5(a) No. I do not agree.
5(b) Corporate aviation should, recreational aviation should not.
5(c) Yes. Aircraft with engines of less than 260hp and less than 5 seats, replica aircraft, "war-birds", home-built and factory built aircraft presently operating under a "permit to fly" should be excluded.

Reason

The above system has operated VERY SUCCESSFULLY in the UK for many years and does not need to be changed.

Response

This comment refers to question 5 of the explanatory memorandum.

It has been transferred.

Cmt. ***1120 / ECOGAS***

Comment

Rephrase the final sentence to 'All equipment required within the Minimum Equipment List'.

Reason

Response

Comment accepted.

Sentence deleted.

Cmt. ***1149 / ECA***

Comment

Please add the following phase at the end of the paragraph :
'except where provided in a MEL, subject to pilot in command acceptance'

Reason

Provision for MEL should be introduced.

Response

Comment accepted.

Sentence deleted.

Cmt. *1197 / LFV Sweden*

Comment

: Delete “operational” in the second line.

Reason

This specification is not needed. This may not only be operational equipment. Additionally, this term is not clear.

Response

Comment accepted.

Text changed.

Cmt. *1198 / LFV Sweden*

Comment

Change the last sentence to read: “All installed equipment must be in an operating condition, except as provided for in the MEL where applicable.”

Reason

The current wording might lead to the false assumption that a pilot in command is allowed to depart with inoperable equipment if he/she considers the equipment as not needed for the flight.

Response

Comment accepted.

Sentence deleted.

Cmt. *1365 / Civil Aviation Administration FINLAND*

Comment

Change the last sentence of 5.a to read:
All installed equipment must be in an operating condition, except as provided for in the MEL, where applicable.

Reason

The current wording might lead to the false assumption that a pilot in command is allowed to depart with inoperable equipment if he/she considers the equipment as not needed for the flight.

Response

Comment accepted.

Sentence deleted.

Cmt. *1405 / FAA USA*

Comment

The FAA recommends, at a minimum, adding the following sentence to the end of 5.a.:“Conditions for the operation of the aircraft with inoperative equipment must be designed and approved. ”

Further, it would be helpful to add the following detailed provision:
Except as may be provided by the Authority, no person may take off an aircraft with inoperative instruments or equipment unless the following conditions are met:
(1) An approved Minimum Equipment List (MEL) exists for that aircraft, which considers the following:
(i) The MEL must provide for the operation of the aircraft, under specified conditions, with particular instruments, items of equipment or functions inoperative at the commencement of flight;
(ii) The MEL must be based on the Master Minimum Equipment List (MMEL), if available, and must not be less restrictive than the MMEL; and
(iii) The MEL must be designed for a specific aircraft, considering the operator’s aircraft definition and the relevant operational and maintenance conditions.
(2) An alternate specific approval is granted by the Authority. ”

Reason

Both the FAA (under 14CFR 91.213) and Transport Canada require MMEL/MELs to be designed and approved for operations in General Aviation. We believe that an authority consideration for the operation of General Aviation aircraft with inoperative equipment provides a significant safety margin in those operations.

Response

Comment noted.

Sentence deleted.

Cmt. *1439 / Helicopter Club of Great Britain*

Comment

This rule should state "…..operational equipment, if any, necessary……."

Reason

Many very small and vintage aircraft cary no communications or navigation equipment. To require carriage of such equipment would have detrimental economic consequences, and is not necessary for many flights by such aircraft.

Response

Comment accepted.

Text changed but not as proposed.

5.b

Paragraph

Cmt. *469 / ERA*

Comment

5.b An aircraft must be equipped with all necessary appropriate safety, medical and survival equipment, taking account of the risks associated towith the areas of operation, the routes to be flown, the flight altitude, the number of passengers and crew, and the duration of the flight.

Reason

• "All the necessary" is an open-ended phrase; the appropriate equipage level is determined by the subsequent qualifying clauses in the rule.
• Amount of safety and medical equipment is determined by No of passengers and crew.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *585 / EASA/Technical Committee*

Comment

Medical equipment is primarily used in situations other than described in the explanatory note.

Reason

Response

Comment noted.

Cmt. *804 / Airbus*

Comment

An aircraft must be equipped with all necessary safety, medical and, survival and rescue equipment, taking account of the risks associated to the areas of operation, the routes to be flown, the flight altitude and the duration of the flight.

Reason

To address equipment required to assist rescue teams in a more general way than proposed in paragraph 5.d. This kind of equipment may be markings, signaling devices, etc.

See our comment on paragraph 5.d.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1592 / DGAC*

Comment

Modifier le paragraphe comme suit :
« Un aéronef doit être pourvu des équipements nécessaires en matière de sécurité, de médecine, d'évacuation et de survie, en tenant compte des risques associés aux zones de l'opération, des parcours à emprunter, de l'altitude du vol et de sa durée.»

Reason

Afin de clairement prendre en compte les équipements tels que toboggans, cheminement lumineux, issues de secours.

Response

Comment accepted.

Text changed but not as proposed.

5.c

Paragraph

Cmt. *33 / CAA Belgium*

Comment

5.c All data necessary for the execution of the flight must be available on board the aircraft taking account of applicable air traffic regulations, rules of the air, flight altitudes and areas of operation.

proposed text:
Add:
For UAVs, those data shall be available at the remote control station.

Reason

JUSTIFICATION:

self explanatory

Response

For UAVs, the remote control station should be considered as being part of the aircraft.

Text not changed.

Cmt. *468 / ERA*

Comment

5.c All data necessary for the execution of the flight by the crew must be available on board the aircraft taking account of applicable air traffic regulations, rules of the air, flight altitudes and areas of operation.

Reason

Not to be confused with any other data that is required by ground services etc, which will not be pertinent to the crew.

Response

Comment accepted.

Text changed.

Cmt. *586 / EASA/Technical Committee*

Comment

Such data is typically found on maps and charts, which are not considered to fall under the definition of '"instruments and equipment".

Reason

Response

Comment accepted.

Title changed.

Cmt. ***684 / MOT Germany***

Comment

Move text of paragraph 5.c to Chapter 2 “Flight preparation”.

A new sentence should be added to specifically address the quality (accuracy, integrity, etc.) of databanks as part of modern electronic equipment, i.e. E-GWPS etc.

Proposed text: Mechanisms and procedures must be provided to ensure the quality of all electronic data used by on board equipment which are relevant for the safe conduct of flight.

Reason

The proposed text in paragraph 5.c of Chapter 5 “Instruments and equipment” is not dealing with equipment related items, but with data necessary for planning and preparing the intended flight. Therefore, we feel that the text fits better in Chapter 2 “ Flight preparation”.

Response

This is an issue to be addressed through implementing rules as far as electronic data is concerned. The updating has been taken into account.

Text changed but not as proposed.

Cmt. ***822 / LBA***

Comment

Move text of paragraph 5.c to Chapter 2 “Flight preparation”.

A new sentence should be added to specifically address the quality (accuracy, integrity, etc.) of databanks as part of modern electronic equipment, i.e. E-GWPS etc.

Proposed text: Mechanisms and procedures must be provided to ensure the quality of all electronic data used by on board equipment which are relevant for the safe conduct of flight.

Reason

The proposed text in paragraph 5.c of Chapter 5 “Instruments and equipment” is not dealing with equipment related items, but with data necessary for planning and preparing the intended flight. Therefore, we feel that the text fits better in Chapter 2 “ Flight preparation”.

Response

This is an issue to be addressed through implementing rules as far as electronic data is concerned. The updating has been taken into account.

Text changed but not as proposed.

5.d

Paragraph

Cmt. ***118 / Popular Flying Association***

Comment

Text should be modified to make clear this requirement applies only to public transport aircraft.

Reason

The requirement is inappropriate to recreational aircraft, where the location of the passenger compartment is obvious.

Response

Paragraph deleted.

Cmt. ***161 / RSA***

Comment

Annex 2 – 5 Instruments and equipment paragraph 5.d
Areas of the fuselage suitable for break in by rescue crews in an emergency must be appropriately marked.

COMMENT:
This paragraph is not relevant for Amateur Built Aircraft and any small aircraft for which the MOTW is below 6000 lbs (2730 kg)

Reason

as per design

Response

Paragraph deleted.

Cmt. ***234 / CAA, UK***

Comment

This draft ER introduces a new requirement where presently there is none. The draft ER misinterprets the ICAO Standards that relate to the marking of break-in areas on the fuselage. The ICAO Standards do not require any break-in areas to be marked - only that if suitable areas are to be identified, they must be marked in the specified manner. Suggest instead that 5.d is deleted: or if it is retained, it should read as follows: -

Any areas of the aircraft fuselage that are to be identified as suitable for break-in by rescue crews in an emergency must be appropriately marked.

Reason

It would be inappropriate to mandate break-in markings for all aircraft, and to insist on this would go beyond what is strictly necessary to achieve the expected safety benefit and create an undue burden that would not be justified by that objective.

Response

Paragraph deleted.

Cmt. ***326 / British Airways Plc***

Comment

British Airways proposes that 5.d is deleted. “Areas of fuselage suitable for break in by rescue crews in an emergency must be appropriately marked”.

Reason

The proposed requirements in par. 5.d – “Areas of the fuselage suitable for break-in by rescue crews in an emergency must be appropriately marked”– exceed the requirements of JAR-OPS 1.800. The proposed requirements also exceed the requirements of ICAO Annex 6, part I, paragraph 6.2.4 which is referenced in item 32 of the Explanatory Note to this NPA.

JAR-OPS (which is essentially the same as ICAO Annex 6, part I, par. 6.2.4) has no requirement for marking suitable break-in areas, however the proposed requirements in NPA 02/2004 do require this marking without providing the rationale for introducing it.

ICAO Annex 6, part I, par. 6.1.4 contains the following
Note — This Standard does not require any aeroplane to have break-in areas.

The majority opinion of the JAA-Cabin Safety Steering Group is that "break-in points" are not necessarily beneficial because crash scenarios vary widely and a crash crew could even be distracted from most urgent intervention if directed to marked break-in points.

If these markings are a requirement British Airways suggests that this should be an ER applicable to aircraft certification. The operator's obligation (but not to be ruled at the level of E. R.'s) would be to ensure that those markings (where available) are clearly visible in all painting schemes used for an aircraft.

British Airways therefore contends that there is no case to alter the current requirements as reflected in ICAO Annex 6 and JAR OPS 1.800.

Response

Paragraph deleted.

Cmt. *417 / AEA*

Comment

Delete 5.d “Areas of fuselage suitable for break in by rescue crews in an emergency must be appropriately marked”.

Reason

The proposed requirements in par. 5.d –Areas of the fuselage suitable for break-in by rescue crews in an emergency must be appropriately marked– exceed those of JAR-OPS 1.800. The proposed requirements even exceed the requirements of ICAO Annex 6, part I, paragraph 6.2.4 which is referenced in item 32 of the Explanatory Note to this NPA.

Whereas in JAR-OPS (which is essentially the same as ICAO Annex 6, part I, par. 6.2.4) there is no requirement for marking suitable break-in areas, the proposed requirements in NPA 02/2004 do require this marking without mentioning the rationale for it.

Before the latest change to JAR-OPS 1.800 it also required areas of the fuselage suitable for break-in to be marked. At that time it was impossible to get the right definition of the word “suitable”.

At least one aircraft manufacturer shows the majority of the fuselage side wall to be “suitable for break-in” on the so called crash charts for airport rescue teams.

In reply to the question on break-in areas another aircraft manufacturer showed certain areas on top of the fuselage as the areas with the best options for entry from a structures point of view.

In the end it was understood that the authorities more or less agreed to the definition that “an area of the fuselage suitable for break-in” is a break-in area which has been incorporated into the design (structure) of the airplane from the beginning.

We would like to emphasize that ICAO Annex 6, part I, par. 6.1.4 contains the following
Note — This Standard does not require any aeroplane to have break-in areas.

In the JAA-Cabin Safety Steering Group the majority opinion is that "break-in points" are not necessarily beneficial because crash scenarios vary widely and a crash crew could even be distracted from most urgent intervention if directed to marked break-in points.

In addition, we believe that marking of "break-in points" should not be prescribed at the level of "Essential Requirements" but be a certification requirement to be observed by OEM's instead of operators of aircraft.

Furthermore it should be made clear that their purpose is only an information showing points where penetration is easier than elsewhere, but not that they must be used in each case.

The operator's obligation (but not to be ruled at the level of E. R.'s) would only be to ensure that those markings (where available) are clearly visible in all painting schemes used for an aircraft.

Based on the above arguments, we see no reason to deviate from current requirements as reflected in ICAO Annex 6 and JAR-OPS 1.800.

Response

Paragraph deleted.

Cmt. *587 / EASA/Technical Committee*

Comment

Nonsense. This is neither an ICAO requirement nor a JAA requirement. It is non-essential. No evidence exists that break-in markings have saved any life in the past 50 years (other than bands surrounding existing exits, which fall outside the definition of break-in markings).

Reason

Response

Paragraph deleted.

Cmt. *685 / MOT Germany*

Comment

Replace 5.d. by following text: Means must be provided to facilitate the egress and rescue in case of an emergency.

Reason

The old 5.d. is an important but specific (versus ‘essential’) requirement. More importantly, it does not fit under headline ‘ Instruments and equipment’ and should either be replaced by a more generic essential requirement or moved to another, newly created headline , such as: Emergency egress and rescue provisions.

Response

Paragraph deleted.

Cmt. ***805 / Airbus***

Comment

Delete this paragraph

Reason

This paragraph is too specific for an essential requirement. Equipment to assist rescue teams can be covered, in a more genera way, in paragraph 5.b (see our comment on paragraph 5.b).

Paragraph 5.d, as proposed, may be understood as requiring aircraft to have break-in areas marked. ICAO Annex 6 standards do not require this. They just require a specific shape and colour for the marking, if there is a marking. JAR-OPS 1.800 was long debated, and subject to NPA OPS-15, before coming to the same conclusion as ICAO: marking is not required, but if there is one it must follow a certain scheme.

Response

Paragraph deleted.

Cmt. ***823 / LBA***

Comment

Replace 5.d. by following text: Means must be provided to facilitate the egress and rescue in case of an emergency.

Reason

The old 5.d. is an important but specific (versus 'essential') requirement. More importantly, it does not fit under headline ' Instruments and equipment' and should either be replaced by a more generic essential requirement or moved to another, newly created headline , such as: Emergency egress and rescue provisions.

Response

Paragraph deleted.

Cmt. ***958 / RSA***

Comment

This paragraph is not relevant for Amateur Built Aircraft and any small aircraft for which the MOTW is below 6000 lbs (2730 kg)

Reason

as per design

Response

Paragraph deleted.

Cmt. ***1199 / LFV Sweden***

Comment

Delete this subpara.

Reason

This is a requirement that goes further than Annex 6, where marking is optional and the requirement applies only if someone chooses to mark the break-in areas. A text similar to the one in Annex ´6 is suitable for IR.

Response

Paragraph deleted.

Cmt. ***1366 / Civil Aviation Administration FINLAND***

Comment

Delete the whole paragraph 5.d

Reason

The paragraph 5.d in Essential Requirements is too low in importance compared with many other requirements of instruments and equipment, which are not mentioned in this Annex 2.
The requirement has also been set wrongly, because ICAO Annex 6 does not require this kind of markings, if there are no such areas of the fuselage designed. (See ICAO Annex 6 Part I Paragraph 6.2.4 Note.)

Response

Paragraph deleted.

Cmt. *1440 / Helicopter Club of Great Britain*

Comment

ICAO SARPS do not require the marking of break in areas on any aircraft. Such markings are irrelevant on small aircraft and helicopters. There should be a weight demarcation, say 5000Kg below which marking of break in areas in not necessary. Almos none of the light aircraft registered in the EU have break in markings.

Reason

Small aircraft can be broken into by rescue crews at almost any point due to the lightness of their construction. There are no designated break in areas in small aircraft, and to require such marking would be ineffective and useless. There would be a severe economic impact for no increase in safety.

Response

Paragraph deleted.

Cmt. *1461 / J. Miller*

Comment

5d For recreational sport aircraft, windows and doors need not be marked because these are not marked at present and it is obvious where to break in.

Reason

Response

Paragraph deleted.

6.a

Paragraph

Cmt. *467 / ERA*

Comment

6.a The aircraft must not be operated unless:
- the aircraft is maintained in an airworthy condition;
- the operational and emergency equipment necessary for the intended flight is serviceable; subject to the provisions of the MMEL/MEL
- the airworthiness certificate of the aircraft is on board the aircraft and valid; and
- the maintenance of the aircraft is performed in accordance with its maintenance programme.
- all maintenance required by the aircraft's maintenance programme has been performed, except where appropriate derogations are in place.

Reason

- reference must be made to the MEL
- it is a requirement that the airworthiness certificate is also on board the aircraft
- allowance needed for approved derogations

Response

Point 1: The MEL is only for commercial activities.

Point 2: This is covered in 5.c.

Point 3: The provision for derogations is in article 10.3 of the Basic Regulation.

Text not changed.

Cmt. *535 / IFALDA*

Comment

Comment only: A flight dispatcher would have to know if the operational and emergency equipment is serviceable and operational as it is a consideration for pre-flight planning and the briefing of the flight crew. The flight dispatcher's input could prevent the illegal dispatch of a flight,

Reason

Only a comment, not a change

Response

Comment noted.

Cmt. ***806 / Airbus***

Comment

Delete this paragraph and renumber other paragraphs in chapter 6 accordingly

Reason

The first three bullets are redundant with paragraph 2.c (see our comment on paragraph 2.c).

The fourth bullet should be moved to paragraph 6.c.

Response

Comment noted. This is ICAO text that develops what is understood as airworthy in 2.c.

Text not changed.

Cmt. ***1016 / CAA Denmark***

Comment

§6.a last DOT
The text "the maintenance of the aircraft is performed in accordance with its maintenance programme" should be changed to: " the maintenance of the aircraft is performed in accordance with its approved maintenance programme.

Reason

Response

Comment accepted.

Text changed.

Cmt. ***1200 / LFV Sweden***

Comment

Change the text in the second bullet point to read: "... the aircraft is in an ..."

Reason

The requirement for maintenance comes in the last bullet point.

Response

Comment accepted.

Text changed.

Paragraph ***3rd bullet***

Cmt. ***235 / CAA, UK***

Comment

6.a Third bullet:
This draft ER reflects ICAO Standards such as Annex 6 Part III, Section III, 6.1.1. Accepting the proposition (see Consultation document, question 14c) that these ERs should be applicable to all general aviation, this requirement is considered too specific because it does not provide for any alternative to a certificate of airworthiness (C of A). Whilst it is entirely proper to require that normal operations are conducted with a valid C of A, this omission would preclude any flight by an aircraft that has no airworthiness certification; and would also render impossible any special provision, e.g. for a delivery flight when the certificate of airworthiness has expired. Suggest instead -

[The An aircraft must not be operated unless:]

- the airworthiness certificate or equivalent approved document is valid; and

Reason

This makes the requirement more suitable for general application.

Response

Comment accepted.

Text changed but not as proposed.

6.b

Paragraph

Cmt. ***1201 / LFV Sweden***

Comment

: Delete

Reason

The requirement is more suited as an IR

Response

This paragraph addresses the pre-flight inspection which is fundamental.

Text not changed.

Cmt. ***1367 / Civil Aviation Administration FINLAND***

Comment

Delete the paragraph 6.b totally or correct the wording of paragraph 6.b to read:
Before each flight, the pre flight check of the aircraft must be executed to determine whether it is fit for the intended flight.

Reason

The term “inspection” means a technical inspection done by an inspector of the authority, when supervising the airworthiness of the aircraft. A better term is “Pre Flight Check.
The requirement is more suited as an IR.

Response

Comment accepted .

Text changed but not as proposed.

Cmt. ***1461 / J. Miller***

Comment

6b If the pilot of a recreational sport aircraft has carried out a full technical inspection of the aircraft (full walkaround including electrical appliances checks and fuel contamination checks) on the same day and the aircraft has not left his sight since that inspection he need not carry out a full technical inspection before the next flight. For example, if a sport pilot flies to another airfield for lunch, for his second flight back to his home base he need not necessarily make a full inspection but he would normally be expected to visually check the levels of engine oil and fuel before every flight.

Reason

Response

Even if the aircraft has not left the pilot's sight, it may have sustained damage or foreign objects attached to it that only a pre-flight check would show.

Text not changed.

6.c

Paragraph

Cmt. ***162 / RSA***

Comment

Annex 2 – 6 - Continuous airworthiness paragraph 6.c
The maintenance programme, must contain in particular,maintenance tasks and intervals, especially those that have been specified as mandatory in the applicable type certification.

COMMENT:
This paragraph is not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification . There is no formal approved maintenance programme . The document used depends of the requirements implemented by National Aviation Authorities of Member States

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. ***466 / ERA***

Comment

6.c The maintenance programme, must contain in particular, maintenance tasks and intervals, especially those that have been specified as mandatory in the applicable type certification.

Suggest that this paragraph is re-written. Deleting either one of the highlighted phrases would improve the language significantly – but the meaning will need to be confirmed before re-writing.

Reason

Not very good English.

Response

Comment noted.

Text changed.

Cmt. ***687 / MOT Germany***

Comment

Amend wording to read:

"The maintenance program must contain details including frequency of all maintenance to be carried out, especially those instructions for continuing airworthiness that have been specified as mandatory by the type certificate holder.

Reason

The wording should be compliant to the wording of Part-M.A.302 (c) + (d).

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***807 / Airbus***

Comment

The maintenance of the aircraft must be performed in accordance with its maintenance programme. The maintenance programme must contain, in particular, maintenance tasks and intervals, especially those that have been specified as mandatory in the applicable type certification.

Reason

See our comment on paragraph 6.a.

Response

Comment noted. See answer to paragraph 6.a

Text changed but not as proposed.

Cmt. ***825 / LBA***

Comment

Amend wording to read:

"The maintenance program must contain details including frequency of all maintenance to be carried out, especially those instructions for continuing airworthiness that have been specified as mandatory by the type certificate holder.

Reason

The wording should be compliant to the wording of Part-M.A.302 (c) + (d).

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***959 / RSA***

Comment

This paragraph is not fully relevant for amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification . There is no formal approved maintenance programme . The document used depends of the requirements implemented by National Aviation Authorities of Member States

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

6.d

Paragraph

Cmt. ***119 / Popular Flying Association***

Comment

The implementing rules must make it clear that in the case of amateur-built and other light aircraft used for recreational purposes maintenance and release to service can be done by the owner or another qualified person approved by the national authority or other approved organisation.

Reason

The term 'qualified for these tasks' risks being interpreted in too rigorous a fashion unless it is understood that, particularly in the case of amateur-built aircraft, the regime under which organisations such as the PFA oversee construction and maintenance has built up a network of approved persons for this work who have specialist knowledge and experience of this type of aircraft and are entirely competent to supervise maintenance and authorise release to service.

Response

This is already addressed in Regulation (EC) 1592/2002 for continuing airworthiness.

Furthermore, according to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Text changed but not as proposed.

6.e

Paragraph

Cmt. ***465 / ERA***

Comment

6.e The above release to service, must contain the full CRS statement in force at the time of release. in particular, the basic details of the maintenance carried out, the date such maintenance was completed and the identity of the person signing the release. It must be completed and signed to certify that the maintenance work performed has been completed satisfactorily.

Reason

Simpler more flexible ER; the current paragraph is too detailed.

Response

Paragraph deleted.

Cmt. ***1202 / LFV Sweden***

Comment

Delete

Reason

More suitable as an IR

Response

Paragraph deleted.

Cmt. *1368 / Civil Aviation Administration FINLAND*

Comment

Delete the paragraph 6.e totally.

Reason

The requirement is more suitable as an IR.

Response

Paragraph deleted.

Cmt. *1531 / MOT/PW&WM NL*

Comment

6E (details of release to service) as a whole should be deleted.

Reason

the requirements for release to service should be regulated at the level of IR. This requirement is already part of Commission regulation 2407/2003 Part M.

Response

Paragraph deleted.

6.f

Paragraph

Cmt. *34 / CAA Belgium*

Comment

All records demonstrating the airworthiness of the aircraft must be kept until the information contained has been superseded by new information equivalent in scope and detail. [...]

Comment:
Don't we need the complete historic ?

Reason

Response

Traceability is an important factor in ensuring airworthiness. Data need not be kept indefinatly but until it is superseded.

Text changed but not as proposed.

Cmt. *35 / CAA Belgium*

Comment

[...] When the aircraft is leased, all records demonstrating the airworthiness of the aircraft must be kept for the length of the lease.

Comment:
Don't we need the complete historic ?
I suppose we speak about dry-lease-in.

Proposed text:
6.f [...] When the aircraft is dry-leased, the lessee is responsible for the keeping of all records demonstrating the airworthiness of the aircraft must be kept for the length of the lease.

Reason

Add clarity about responsibility

Response

The data should be kept in the same way by the leassee as it would by the lessor, to ensure airworthiness.

This paragraph normally addresses dry lease.

Text changed but not as proposed.

Cmt. *236 / CAA, UK*

Comment

It is suggested the second sentence could be improved by text change as follows -

…When the aircraft is leased, all records demonstrating the airworthiness of the aircraft must be kept for at least the length of the lease.

Reason

This clarifies that documents must still be kept until superseded, and not just until the end of the lease.

Response

Comment accepted.

Text changed.

Cmt. *464 / ERA*

Comment

6.f All records demonstrating the airworthiness of the aircraft must be kept until the information contained has been superseded (or replaced, or updated) by new information equivalent in scope and detail. When the aircraft is leased, all records demonstrating the airworthiness of the aircraft must be kept for the length of the lease??

Suggest that this paragraph is reviewed thoroughly as to:
- The intention
- The scope
- Definitions, and
- The English used.

Reason

- There is the issue of keeping maintenance records – this varies depending on the type of record or document.
- There is also the issue of when the aircraft is taken out of service, and the associated length of time that records need to be retained.
- When talking about leasing, it is important to define “dry” or “wet” and leasing “in” or “out”
- The first sentence is very unclear. Using the word “maintained” indicates that the information contained in the records is the most up-to-date, perhaps it should be used instead of the long explanation?

Response

Point 1: There is no change with the existing practices. If the records are not kept there is no way of knowing if the aircraft is airworthy.

Point 2: Components on certain aircraft taken out of service can reenter the supply chain. One cannot simply dispose of records at a fixed time after the aircraft has been taken out of service. Implementing rules give more detailed information.

Point 3: This paragraph normally addresses dry lease as no precision has been given.

Point 4: Comment noted.

Text changed.

Cmt. *688 / MOT Germany*

Comment

Amend wording to read:

“All records demonstrating the airworthiness of the aircraft must be kept for a period of time sufficient for the continuous management of the airworthiness of the aircraft until the information has been superseded by new information equivalent in scope and detail.”

Reason

New wording makes the wording compliant to Part-M and Part-145. Details of the retention periods can be laid down in the implementing rules. We see no need to distinguish between aircraft leased or owned by the operator. Therefore the last sentence should be deleted.

Response

The proposal is not precise enough and does not provide for legal certainty.

Text changed but not as proposed.

Cmt. ***826 / LBA***

Comment

Amend wording to read:

"All records demonstrating the airworthiness of the aircraft must be kept for a period of time sufficient for the continuous management of the airworthiness of the aircraft until the information has been superseded by new information equivalent in scope and detail."

Reason

New wording makes the wording compliant to Part-M and Part-145. Details of the retention periods can be laid down in the implementing rules. We see no need to distinguish between aircraft leased or owned by the operator. Therefore the last sentence should be deleted.

Response

The proposal is not precise enough and does not provide for legal certainty.

Text changed but not as proposed.

Cmt. ***1203 / LFV Sweden***

Comment

This paragraph appears not to give the appropriate basis for fulfilling the requirements for record keeping in Annex 6 and the requirements are less than those currently in JAR-OPS. It is doubtful if the principle of letting new documentation supersede older, fulfils the requirements for record keeping in Annex 6.

Reason

See comment

Response

Comment accepted.

Text changed.

Cmt. ***1369 / Civil Aviation Administration FINLAND***

Comment

This paragraph appears not to give the appropriate basis for fulfilling the requirements for record keeping as required in Annex 6 and the requirements are less than those currently in JAR-OPS. It is doubtful if the principle of letting new documentation supersede older, fulfils the requirements for record keeping in Annex 6. Many maintenance documents shall be preserved until the next major overhaul or for defined time.

Reason

The requirement is more suitable as an IR.

Response

Comment accepted.

Text changed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

Delete this point

Reason

These requirements form already part of the implementing procedures on continuing airworthiness Commission regulation no:2042/2003 Part M and regulation at the level of ER's. does not seem justified.

Response

This gives a stronger legal basis to Commission regulation (EC) 2042/2003.

Text changed but not as proposed.

6.g

Paragraph

Cmt. ***163 / RSA***

Comment

Annex 2 – 6 - Continuous airworthiness paragraph 6.g
All modifications and repairs must comply with the essential requirements for airworthiness set forth in Annex I. The substantiating data supporting compliance with the airworthiness requirements must be retained.

COMMENT:
This paragraph is not applicable to amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification .
If an aircraft is repaired , it will be in accordance with the requirements set forth by the National Authorities of the Member States and not the requirements identified in ER 1592/2002 Annex 1

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. ***211 / CAA, UK***

Comment

Add to first sentence “Annex 1 of Council Regulation (EC) 1592/2002”.

Reason

The reference to Annex 1 is misleading, as this document has no Annex 1 attached.

Response

This Essential Requirement will be part of Regulation (EC) 1592/2002.

Text not changed.

Cmt. ***960 / RSA***

Comment

This paragraph is not applicable to amateur built and vintage aircraft as identified in Annex 2 of ER 1592/2002

Reason

Amateur built and vintage aircraft are not subject to Type certification .
If an aircraft is repaired , it will be in accordance with the requirements set forth by the National Authorities of the Member States and not the requirements identified in ER 1592/2002 Annex 1

Response

According to article 4.2 in Regulation (EC) 1592/2002 aircraft included in Annex II are not subject to this regulation (see article 1b).

Cmt. ***1531 / MOT/PW&WM NL***

Comment

Delete this point

Reason

These requirements form already part of the implementing procedures on continuing airworthiness Commission regulation no:2042/2003 Part M and regulation at the level of ER's. does not seem justified.

Response

This gives a stronger legal basis to Commission regulation (EC) 2042/2003.

Text not changed.

7.a

Paragraph

Cmt. *588 / EASA/Technical Committee*

Comment

There is an essential requirement missing for flight crew training specific to the operation and in addition to that required to maintain the licence (e.g. OPC, LVO, CRM, safety and emergency equipment)

Reason

Response

Comment agreed for commercial purposes and operation of large aircraft.

Text changed in paragraph 8a.2.

Paragraph

Cmt. *37 / CAA Belgium*

Comment

The number and composition of the crew must be determined taking into account:
- the certification limitations of the aircraft including if applicable, the relevant emergency evacuation demonstration; and
- the type and range of operations.

Proposed text:
Add:
- for UAVs, the certification limitations of the remote control station.

Reason

self explanatory

Response

For UAVs, the remote control station should be considered as being part of the aircraft.

Text not changed.

Cmt. *328 / British Airways Plc*

Comment

British Airways suggests a simplification of paragraph 7a ("The number and composition of the crew must be determined taking into account: • the certification limitations of the aircraft, including if applicable, the relevant emergency evacuation demonstration; and • the type and range of operations.") to state:

"The number and composition of the crew must be specified"

Reason

The essential requirements should only address the principle. The methodology for how the crew compliment is determined should be addressed in the Implementing Rules. This would also address the situation of reduced cabin crew numbers in case o unforeseen situations, as addressed in today's JAR OPS 1.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. *419 / AEA*

Comment

The AEA proposes to rewrite paragraph 7a ("The number and composition of the crew must be determined taking into account: • the certification limitations of the aircraft, including if applicable, the relevant emergency evacuation demonstration; and • th type and range of operations.") to read as
"The number and composition of the crew must be specified"

Reason

For the essential requirements it would be better only to address as a principle the need for the computation of the cabin crew. The way this computation is done, should be a matter to be addressed in the Implementing Rules. This would allow to take into account other conditions like reduced cabin crew numbers in case of unforeseen situations, as addressed in today's JAR OPS 1

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. ***808 / Airbus***

Comment

Airbus proposes to rewrite paragraph 7a to read as
"The number and composition of the crew must be specified"

Reason

This paragraph refers to crew members which implies cabin crew as well flight crew. Consequently it would be best for the essential requirements to only to address the fact that number and composition need to be specified, and expand the criteria in the implementing rules.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. ***1154 / ACG Austria***

Comment

1) Article 7) add a new paragraph:
"Flight crew members must
• keep an adequate level of competence and/or be trained and checked on a regular basis to attain and maintain an adequate level of competency, and
• Keep a valid licence.

Reason

. The need of a licence should be mandated.

Response

This point is addressed in Essential Requirements for pilot licensing and in paragraph 7.b for cabin crew.

Text not changed.

Cmt. ***1204 / LFV Sweden***

Comment

Add a new second bullet with the following text:
• The relevant emergency procedures

Reason

To highlight the need to take account of the relevant emergency procedures when determining the minimum crew, e.g. in connection with "controlled rest".

Response

The proposal is too detailed for Essential Requirements. This issue will be dealt with through implementing rules.

Text not changed.

Cmt. ***1594 / DGAC***

Comment

Modifier le paragraphe comme suit :
« La composition de l'équipage et son nombre doivent être déterminés en tenant compte :
- des limitations de certification de l'aéronef y compris, si elle est applicable, la démonstration correspondante d'évacuation d'urgence,
- des caractéristiques de l'aéronef et
- du type et du rayon de la durée des opérations»

Reason

Les règles de composition de l'équipage de cabine du JAR OPS 1.990 en fonction du nombre de sièges ne sont pas liées aux limitations de certification ou au démonstration de certification, mais plutôt à la caractéristique de l'aéronef. Le cas des avions double ponts doit également être pris en compte.
Plus que la longueur du vol, c'est sa durée qui doit être prise en compte dans la composition de l'équipage.

Response

Comment accepted.

Text changed.

7.b

Paragraph

Cmt. ***329 / British Airways Plc***

Comment

British Airways contends that paragraph 7b (second bullet point) should be deleted
Cabin crewmembers must:
• be trained and checked on a regular basis to attain and maintain an adequate level of competency in order to perform their assigned duties,
• periodically demonstrate mental and physical fitness to safely exercise the privileges of their license and rating. Compliance must be shown by appropriate assessment based on aeromedical best practice, taking into account mental and physical degradation due to age. remain fit to perform their assigned duties

Reason

The EU Directive on the Organisation of Working Time of Mobile Workers in Civil Aviation (2000/79/EC), Article 4.1.a, only requires health assessment at regular intervals, which does not require a full medical examination.

Reference also the proposed new text in EU-OPS 1.995.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***420 / AEA***

Comment

Para 7b (second bullet point) should be deleted
Cabin crew members must:
• be trained and checked on a regular basis to attain and maintain an adequate level of competency in order to perform their assigned duties,
• periodically demonstrate mental and physical fitness to safely exercise the privileges of their license and rating. Compliance must be shown by appropriate assessment based on aeromedical best practice, taking into account mental and physical degradation due to age. remain fit to perform their assigned duties

Reason

The EU Directive on the Organisation of Working Time of Mobile Workers in Civil Aviation (2000/79/EC), Article 4.1.a, only requires health assessment at regular intervals, which does not necessary mean a full medical examination.

Reference to be made to the new text in EU-OPS 1.995: after the EU Council of 11 June 2004 the provisions become very detailed and specific (and acceptable to the operators). This current text is basically supporting a.m. deletion of the second bullet point paragraph.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***463 / ERA***

Comment

Cabin crew members must:
• ..stet...
• be assessed periodically demonstrate mental? and for physical fitness to safely exercise the privileges of their licence and ratingtheir assigned duties. Compliance must be shown by appropriate This assessment must be based on aeromedical best practice, taking into account mental and physical degradation due to age.

Reason

• There is no requirement to periodically “demonstrate” mental fitness – this term implies some form of psychological and/or psychiatric testing = dangerous ground to become embroiled in. Mental fitness in practical terms can be determined by the competence level, which is accounted for in the previous bullet-point.
• There is no European Cabin Crew licence or rating; cabin crew are trained both to the standards required by their employer, and to meet the requirements detailed currently in JAR OPS 1, sub-part O (eventually in EASA IRs). These are the benchmarks and minimum standards recommended for cabin crew to perform their duties adequately. Using the term “their assigned duties” ties in with the previous bullet-point. This wording may be an attempt to mandate a licence for cabin crew through a technicality! Cabin crew licences are a completely different issue, and if mandated would result in substantial costs for operators with no visible safety benefits. Before licences are even considered, a full safety/cost/benefit analysis needs to be undertaken – and a sound case made. Current provisions appear to provide adequate levels of safety.
• The assessment is based on aeromedical best practice: compliance is implicit in the first sentence.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***809 / Airbus***

Comment

New Para 7.b.1
Flight crew members must:
• be trained and checked on a regular basis to attain and maintain an adequate level of competency in order to perform their assigned duties,
• periodically demonstrate mental and physical fitness to safely exercise the privileges of their license and rating.
When flight crew members training and checking is carried out in a Synthetic Training Device (STD), this STD shall be qualified to a given level of performances, in those areas which are relevant to the flight crew training and checking process.

Reason

As crew members include both flight crew and cabin crew, it seems logic to suggest that flight crew members as well as cabin crew members be trained.
In addition training is most often conducted using synthetic training devices (part task trainers, simulators, etc..), and those training devices need to be qualified and approved for the task.

Response

Flight Crew is addressed in ER FCL.

Text not changed.

Cmt. ***810 / Airbus***

Comment

Para 7.b.2
Cabin crew members must:
• be trained and checked on a regular basis to attain and maintain an adequate level of competency in order to perform their assigned duties,
• periodically demonstrate mental and physical fitness to safely exercise the privileges of their license and rating. Compliance must be shown by appropriate assessment based on aeromedical best practice, taking into account mental and physical degradation due to age. remain fit to perform their assigned duties

Reason

The imposed requirement is the one required for flight crew as it in fact refers to privileges of license and rating; Today there is no JAR requirement for cabin crew license and rating, and it is the operator responsibility to ensure that cabin crew remain fit to perform their duties. Consequently we propose the above simplified text.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1154 / ACG Austria***

Comment

2) Artikel 7.b second bullet, following changes:
“periodically demonstrate mental and physical fitness to safety exercise their assigned duties .privileges of their licence and rating.”

Reason

For Cabin crew, no licence should be required. Cabin crew have to be trained by the operator according to the required function

Response

Comment accepted.

Text changed.

Cmt. ***1205 / LFV Sweden***

Comment

In the second bullet:
1. change the word “mental” to “medical” in accordance with the ERs in Annex 1 para 3, and
2. delete the word “physical”.

Reason

The word “mental” is included in the word “medical”. Annex 1 para 3 is titled “medical and physical fitness”. Ideally, the word “physical” should be deleted as it is also included in the word “medical”.

Response

Comment accepted.

Text changed.

Cmt. *1370 / Civil Aviation Administration FINLAND*

Comment

Change the wording in 7.b second bullet:
.... the privileges of their attestation of training and cabin crew authorization.

Reason

The cabin crew licence and associated ratings are not mandatory. The cabin crew shall have the attestation of training and the authorization of the operator to the task and type of aircraft.
(See our comment to Consultation Document Question 15.)

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1407 / FAA USA*

Comment

Great care will need to be taken in the development or alteration of medical requirements relating to age for cabin staff. Creating new standards or changing current standards will be expensive to design and expensive to administer. It is not clear that adoption of age requirements or changing age requirements for cabin staff will provide a significant safety return.

The FAA believes that the development of fully researched medical standards will be necessary should change be required.

Reason

Response

Comment accepted.

Text changed.

Cmt. *1507 / CAA Austria*

Comment

: In addition to the mentioned requirements the crew should be holding the appropriate valid licenses and medical certificates.

Reason

The licensing requirements for the crew members should be clarified also in this context .

Response

This has been added to the answer to the consultation document. At the moment no decision has been taken on the issue. As soon as it is, the text will be amended accordingly.

Text changed.

Cmt. *1531 / MOT/PW&WM NL*

Comment

Delete the second bullet of 7b

Reason

General Reserve: All replies to the questions presented in NPA 2/2004 are given without prejudice to the formal national positions now and in the future in the Transport Council. Responses are aimed at providing insight in the current national debate on these aviation safety issues.

The Netherlands do not favour the introduction of a cabin crew licence nor the introduction of mandatory mental and physical checks for cabin crew. The Netherlands find that such safety measures belong to the responsibility of the crew member and /or the responsibility of the air operator under its AOC.

Response

This has been added to the answer to the consultation document. At the moment no decision has been taken on the issue. As soon as it is, the text will be amended accordingly.

Text changed.

Cmt. *1702 / ETF*

Comment

As mentioned in other ETF comments and responses to the Consultation Document, the ETF considers that Essential Requirements for Cabin Crew Proficiency need to be developed, in line with the Essential Requirements for Pilot Proficiency, in addition and taking full account of the proposed Essential Requirements for Air Operations.

Reason

The ETF considers that the number and nature of actual duties and responsibilities of cabin crew have become such that the associated training and checking, as well as the required continuous competency, will not be properly covered by the sole paragraph 7.b.
This consideration stopped the ETF from sending specific “cabin crew proficiency” proposals on paragraph 7b of the Draft ER for Air Operations.
Rather, the ETF is willing to contribute to, and comment on, a future draft proposal of comprehensive Essential Requirements for Cabin Crew Proficiency, which would either stand alone as a separate Annex, or be linked to ERs for pilots and for air operations. This text could be prepared on the basis of existing texts, such as ICAO Annex 6 - Chapter 12, or JAR-OPS 1 and national legislation where the latter exists, as well as ICAO Cabin Crew Training Manual.

Response

At the moment no decision has been taken on the issue of licensing of cabin crew . As soon as it is, the text will be amended accordingly.

Text changed.

Paragraph *2nd bullet*

Cmt. *237 / CAA, UK*

Comment

7.b Second bullet:
This element of the draft ER is insufficiently generic to provide the flexibility necessary for development of IRs appropriate to take into account different types of operation. To assume a requirement for a system of licensing cabin crew members in this way within the ERs does not facilitate the development and refinement of appropriate Implementing Rules, but has the effect of prejudging and pre-empting the IR material.

With regard to persons who may fulfil the 'cabin crew' role on corporate flights, it is considered that the implementing rules and/or industry rules can make appropriate provision for their training etc without the need for a system of licensing. To insist on licensing in this area would go beyond what is strictly necessary to achieve the expected safety benefit and create an undue burden that would not be justified by that objective.

Suggest revise the text as follows -

periodically demonstrate mental and physical medical fitness to safely exercise the privileges of their licence and rating their designated role. Compliance must be shown by appropriate assessment based on aeromedical best practice, taking into account mental and physical degradation due to age.

Reason

This makes the requirement more suitable for general application and facilitates the development and refinement of appropriate Implementing Rules.

Response

Comment accepted.

Text changed but not as proposed.

7.c

Paragraph

Cmt. *38 / CAA Belgium*

Comment

The pilot in command must have authority to give all commands and take any appropriate actions for the purpose of securing the safety of the aircraft and of persons or property carried therein.

Proposed text:
7.c The pilot in command must have authority to give all commands and take any appropriate actions for the purpose of securing the safety of the flight (including the related movements on the ground)

Reason

Safety of third party and property on ground must be taken into account.
Safety of the flight includes third party and property on ground, passengers, crew members, cargo and the aircraft itself.

Response

Related movements on the ground are included in the operation of an aircraft.

Text not changed.

Cmt. ***462 / ERA***

Comment

7.c The pilot in command must have be given the authority to give all commands and take any appropriate actions for the purpose of securing the safety of the aircraft and of persons or property carried therein.

Reason

The “authority” is bestowed upon the commander; the way the rule is written suggests that the commander must have the “ characteristic” of authority.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***718 / SNPL / French ALPA***

Comment

7.c After the word “safety”
(add) and security

Reason

ICAO regulation

Response

Responsibility for security is not within the scope of EASA.

Text not changed.

Cmt. ***720 / SNPL / French ALPA***

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for Essential Requirements.

Text not changed.

Cmt. ***1150 / ECA***

Comment

Please add the words ‘and security’, after the word safety.

Reason

ICAO regulation

Response

Responsibility for security is not within the scope of EASA.

Text not changed.

Cmt. ***1206 / LFV Sweden***

Comment

Change the wording to read: “… command shall have the authority …”

Reason

This is the regulation giving the pilot in command this authority, therefore a change of wording is necessary.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1371 / Civil Aviation Administration FINLAND*

Comment

Change the wording in 7.c to read:
…command shall have the authority…

Reason

This is the regulation giving the pilot in command this authority, therefore a change of wording is necessary.

Response

Comment acepted.

Text changed but not as proposed.

7.d

Paragraph

Cmt. *39 / CAA Belgium*

Comment

In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot in command must take any action considered necessary in the interest of safety.

Proposed text:
7.d In an emergency situation, which endangers the safety of the flight (including the related movements on the ground), the pilot in command must take any action considered necessary in the interest of safety.

Reason

Safety of third party and property on ground must be taken into account.
Safety of the flight includes third party and property on ground, passengers, crew members, cargo and the aircraft itself.

Response

Related movements on the ground are included in the operation of an aircraft.

Text not changed.

Cmt. *238 / CAA, UK*

Comment

In the explanatory text, reference has been made to origins of this draft ER in ICAO Annex 6 Part II, 3.2 and 3.3. The first of these references relates to the general responsibility for safety held by the pilot-in-command, and this has been properly reflected in these ERs at paragraph 1.d. The second reference, 3.3 relates only to the making of reports if emergency action involves a violation of local regulations and procedures. Standards such as Annex 6 Part II, 4.11 are also relevant in this context. This draft ER, as presently worded, would put a significant responsibility on the pilot-in-command to take any necessary safety action, when the application of crew resource management principles would involve other crew members. Therefore it is suggested that it should be amended as follows -

In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot-in-command must ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

Reason

This is a general duty applicable to the operation of all aircraft.
It is consistent with the ICAO Standards.

Response

The specific reference in the explanatory note to ICAO Annex 6 Part II, item 3.3 may have been inaccurate. The text of the ER includes the obligation to instruct according to ICAO Part II, item 4.11.

Text not changed.

Cmt. ***330 / British Airways Plc***

Comment

British Airways suggests that paragraph 7d "In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot in command must take any action considered necessary in the interest of safety" is amended to read:
"In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot in command must take any action considered necessary in the interest of safety. In such cases he may deviate from rules, operational procedures and methods"

Reason

JAR OPS 1.085 (g) states clearly that, in case of an emergency, the commander may deviate from rules and procedures (see JAR OPS 1.085 (g) below):
"[(g)] The commander or the pilot to whom conduct of the flight has been delegated shall, in an emergency situation that requires immediate decision and action, take any action he considers necessary under the circumstances. In such cases he may deviate from rules, operational procedures and methods in the interest of safety."

This clear statement does not allow to deviate from rules but clearly says that the pilot in command has the ability to take all necessary actions even if they are not in compliance with rules, etc.

4. PERSON/ORGANISATION PROVIDING THE COMMENT:

Response

The vocabulary "any action" includes necessary deviations.

Text changed but not as proposed.

Cmt. ***421 / AEA***

Comment

The AEA propose to rewrite paragraph 7d "In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot in command must take any action considered necessary in the interest of safety" to read as:
"In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot in command must take any action considered necessary in the interest of safety. In such cases he may deviate from rules, operational procedures and methods"

Reason

JAR OPS 1.085 (g) states clearly that, in case of an emergency, the commander may deviate from rules and procedures (see JAR OPS 1.085 (g) below):
"[(g)] The commander or the pilot to whom conduct of the flight has been delegated shall, in an emergency situation that requires immediate decision and action, take any action he considers necessary under the circumstances. In such cases he may deviate from rules, operational procedures and methods in the interest of safety."

This clear statement does not allow to deviate from rules but clearly says that the pilot in command has the ability to take all necessary actions even if they are not in compliance with rules, etc.

Response

The vocabulary "any action" includes necessary deviations.

Text changed but not as proposed.

Cmt. ***461 / ERA***

Comment

7.d In an emergency a situation, which the pilot in command considers could endanger the safety of the aircraft and/or persons on board, the pilot in command must may take any action considered necessary in the interest of safety.

Reason

The situation may not only be an emergency, but one where the pilot considers that it could become an emergency unless appropriate action is taken. In such cases where the normal regulatory or operational requirements can not prevent the endangerment, then the pilot "may" break the rules. The pilot is already under a condition of "must" by fulfilling the essential requirements and implementing rules.

Response

Paragraph refers to ICAO and JAR-OPS.

Text not changed.

Cmt. ***536 / IFALDA***

Comment

7.d In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot in command must take any action considered necessary in the interest of safety. When the flight dispatcher assigned to the flight becomes aware of an emergency situation, he/she will contact the crew and advise the pilot-in-command of the situation. The flight dispatcher will provide all assistance to the pilot-in-command and record the decision of the pilot. If the flight dispatcher is unable to contact the pilot-in-command he/she shall declare the emergency them self.

7.d.1 If a flight has encountered a situation where, if in the opinion of the pilot-in-command or the flight dispatcher, if it were t continue, it would violate a state regulation or approved company policy, yet there is no safer alternative, then that situation becomes an automatic emergency.

Reason

A key role of the flight dispatcher is that of working with the pilot to provide the best outcome for a flight which may have an emergency. In one way, the dispatcher can provide critical assistance to the pilot-in-command by being an expert available to the pilot for advice in all operational matters. When he/she advises the pilot of an emergency, they can both talk it over and together resolve the best solution.

See Attachment.

Attachment ER 7.d

A key role of the flight dispatcher is that of working with the pilot to provide the best outcome for a flight which may have an emergency. In one way, the dispatcher can provide critical assistance to the pilot-in-command by being an expert available to the pilot for advice in all operational matters. When he/she advises the pilot of an emergency, they can both talk it over and together resolve the best solution. The sooner an emergency situation is recognized as such and addressed and resolved, the greater the chance of a successful outcome. That is why either the pilot-in-command or the flight dispatcher should be able to act in this situation. It has been shown that even experienced professionals are hesitant to recognize an emergency when one becomes apparent. That has happened in a number of the accidents/incidents in Europe. If this had been done in the Hapag-Lloyd A310 accident for example, the flight dispatcher could have used this authority to ensure that the flight land short, such as at Zagreb, instead of continuing on to Vienna, where it ran out of fuel on final approach. That accident would then have beer prevented.

ATC may not be able to be of much assistance regarding emergencies like this in some areas. For one thing European air carriers operate in some areas of the world where ATC capabilities are very limited, such as parts of Africa, Asia and Latin America. Yet at present there is no support for the pilot in those areas by the air carrier. In those types of more risky operational environments it is even more important to the safety of the flight to have the support of an operational control/flight dispatch system with a certified flight dispatcher.

For another thing, ATC is only responsible for traffic separation. They are neither knowledgeable nor equipped to provide the kind of support that an operational control system can. The flight dispatcher would know the performance limitations, meteorology situation, terrain situation, approved airports, aircraft systems, regulations and policies, crew qualifications, navaid/approach capabilities and economic factors of each flight.

Also, if the flight is possibly lost, the flight dispatcher can initiate rescue and recovery operations as soon as they know that an emergency exists.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***720 / SNPL / French ALPA***

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for essential requirements.

Text not changed.

Cmt. ***811 / Airbus***

Comment

Airbus propose to rewrite paragraph 7d “In an emergency situation, which endangers the safety of the aircraft and/or persons on board, the pilot in command must take any action considered necessary in the interest of safety” to read as:
“In an emergency situation, the pilot in command must take any action considered necessary in the interest of safety. In such cases he may deviate from rules, operational procedures and methods”

Reason

JAR OPS 1.085 (g) states clearly that, in case of an emergency, the commander may deviate from rules and procedures (see JAR OPS 1.085 (g) below):
"[(g)] The commander or the pilot to whom conduct of the flight has been delegated shall, in an emergency situation that requires immediate decision and action, take any action he considers necessary under the circumstances. In such cases he may deviate from rules, operational procedures and methods in the interest of safety."

This clear statement does not allow to deviate from rules but clearly says that the pilot in command has the ability to take all necessary actions even if they are not in compliance with rules, etc.

Response

The vocabulary "any action" includes necessary deviations.

Text changed but not as proposed.

Cmt. ***1594 / DGAC***

Comment

Modifier le paragraphe comme suit :
« En cas d'urgence mettant en péril la sécurité de l'aéronef et/ou des personnes à bord, le commandant de bord doit entreprendre toute action jugée nécessaire dans l'intérêt de la sécurité. Si un cas de force majeure qui compromet la sécurité de l’avion ou des personnes nécessite des mesures qui amènent à violer une procédure ou un règlement local, le pilote commandant de bord en rendra compte dans les meilleurs délais.»

Reason

Il est admis qu’en cas de force majeure le commandant de bord puisse prendre toute mesure nécessaire pour préserver la sécurité, y compris en violant certaines dispositions réglementaires, mais dans ce cas il doit en rendre compte (voir annexe 6, 2ème partie, 3.3)

Response

Comment accepted.

Text changed.

7.e

Paragraph

Cmt. ***239 / CAA, UK***

Comment

This draft ER is initially addressed to individual crew members but continues to cover aspects that will in many cases be beyond the control of the individual, i.e. flight time and flight duty periods. Suggest this can be improved as follows -

Rest periods must provide sufficient time to enable crew members to overcome the effects of previous duties and be well rested by the start of the following flight duty period. No crew member must allow their ability to perform tasks and make decisions to deteriorate to the extent that flight safety is endangered because of the effects of fatigue accumulation.

Reason

This clarifies the meaning and removes ambiguity.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***460 / ERA***

Comment

Option 1 – change paragraph.
7.e No crew member must allow their task achievement/decision making to deteriorate to the extent that flight safety is endangered because of the effects of fatigue accumulation.
Crew members must take measures to use planned rest periods in such a way that they do not accumulate fatigue to the extent that the affect on their task-allocation and decision-making endanger flight safety. Rest periods must provide sufficient time to enable crew members to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.

Or,

Option 2: - delete entire paragraph.

Reason

Option 1:
• It is impossible to tell people not to become fatigued! It is only possible to tell them to use their rest time appropriately. However, it is reasonable to provide a requirement for proper rostering of crew schedules to include rest and off-duty periods – and all this is covered in 8.f.
• It is also possible to tell crew members that they should not report for duty if they are fatigued, sick or incapable for some reason – which is already covered in 7.f.

Option 2:
• The need for proper planned rostering is already catered for in ER 8.f
• The instruction to crew members not to operate due to fatigue, medication, sickness or similar cases is covered in 7.f
• As mentioned above it is impossible to instruct people not to become fatigued – I am afraid that fatigue is part of any job. I a crew member's fatigue is going to affect their duty, then that is another question that needs answering – what do they do next?
o Inform someone?
o Take counter-measures?

Response

The commenters concerns are covered by Paragraph 7.g (new) which instructs the crew member not to perform duties when unfit due to fatigue.

Text not changed.

Cmt. ***537 / IFALDA***

Comment

7.e No crew member must allow their task achievement/decision making to deteriorate to the extent that flight safety is endangered because of the effects of fatigue accumulation. Rest periods must provide sufficient time to enable crew members to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period. This shall also apply to other certified ground personnel, including flight dispatchers and maintenance technicians.

Reason

Fatigue (lack of rest) is a factor not just for flight crews, but also for all aviation professionals. When trying to work in a fatigue state, critical mistakes can be made. These then result in serious consequences for the flight crews themselves and subsequently the passengers on board those flights.

Response

Comment noted. This section covers only crew members.

Text not changed.

Cmt. ***689 / MOT Germany***

Comment

Merge paragraph 7.e and paragraph 8.f, dealing with FTL issues to one single paragraph 9 “Prevention of fatigue” as follows:

9 Prevention of fatigue

9.a Operators and crew members must ensure that no crew member allows his/her performance to degrade to an extent where flight safety is jeopardized due to fatigue.

9.b Rest periods must provide sufficient time to enable crew members to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.

9.c For crews performing flight duty tasks as their profession, the operator and crewmembers shall ensure that the prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations need to address fligh time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, cumulative duty time for given periods of time, positioning of allocated tasks between crew members, and also the provision for time zone operations and for augmented crews.

Reason

As regards the proposed essential requirements for the prevention of fatigue, we feel – and the German FTL regulations mirror this circumstance – that the FTL requirements should address, on the highest regulatory level, all crews performing flight operations duties for a living. There should be made no difference if the pilot or cabin crew is earning money for flight duties in an aircraft involved in commercial air transport, aerial work or corporate operations. This also covers the rostering of crews, in which the operator is actively involved also. Hence, German FTL regulations stipulate prosecution of both, the operator and crew member in case of a violation of applicable requirements.

We feel the need to establish the same structure of FTL related requirements on a Community Level.

Response

Section 7. adresses all aviation in general terms. Specific regulation for commercial activities are covered in paragraph 8.f. Creating a section 9 would change the philosophy of the Essential Requirements. Nonetheless paragraph 8.f covers the concern of operator accountability.

Text not changed.

Cmt. ***827 / LBA***

Comment

Merge paragraph 7.e and paragraph 8.f, dealing with FTL issues to one single paragraph 9 “Prevention of fatigue” as follows:

9 Prevention of fatigue

9.a Operators and crew members must ensure that no crew member allows his/her performance to degrade to an extent where flight safety is jeopardized due to fatigue.

9.b Rest periods must provide sufficient time to enable crew members to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.

9.c For crews performing flight duty tasks as their profession, the operator and crewmembers shall ensure that the prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations need to address fligh time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, cumulative duty time for given periods of time, positioning of allocated tasks between crew members, and also the provision for time zone operations and for augmented crews.

Reason

As regards the proposed essential requirements for the prevention of fatigue, we feel – and the German FTL regulations mirror this circumstance – that the FTL requirements should address, on the highest regulatory level, all crews performing flight operations duties for a living. There should be made no difference if the pilot or cabin crew is earning money for flight duties in an aircraft involved in commercial air transport, aerial work or corporate operations. This also covers the rostering of crews, in which the operator is actively involved also. Hence, German FTL regulations stipulate prosecution of both, the operator and crew member in case of a violation of applicable requirements.

We feel the need to establish the same structure of FTL related requirements on a Community Level.

Response

Section 7. adresses all aviation in general terms. Specific regulation for commercial activities are covered in paragraph 8.f. Creating a section 9 would change the philosophy of the Essential Requirements. Nonetheless paragraph 8.f covers the concern of operator accountability.

Text not changed.

Cmt. *1207 / LFV Sweden*

Comment

Delete this para

Reason

The first part of this para is covered by para 7.f which covers more and must therefore be kept. The second part of the para is more suitable for commercial operations and should be moved to para 8 although it could be argued that 8.f covers the matter

Response

There is a need to mandate that crew members not exersise their activity when fatigued. This paragraph specifies some of the criteria.

Text not changed.

Cmt. *1372 / Civil Aviation Administration FINLAND*

Comment

Delete the paragraph 7.e.

Reason

The first part of this paragraph is covered by paragraph 7.f, which covers more and should therefore be kept. The second part of the paragraph is more suitable for commercial operations and should be moved to paragraph 8 although it could be argued that 8.f covers the matter.

Response

There is a need to mandate that crew members not exersise their activity when fatigued. This paragraph specifies some of the criteria.

Text not changed.

Cmt. *1408 / FAA USA*

Comment

The bullets under 7.e. attempt to address a very difficult subject. The first bullet seems difficult to control, difficult for the airman to comply with and difficult to enforce.

Recommend: “Crew members must consider the effects of fatigue accumulation and its affect on task achievement and decision-making when planning rest requirements prior to reporting for flight duty.”

Reason

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1441 / Helicopter Club of Great Britain*

Comment

This rule should not apply to non-commercial flights, thus maintaining current rules

Reason

Such crew time limits are normal in commercial air transport, but irrelevant for private and recreational flying.

Response

Fatigue also influences private aviation. See also ICAO Annex 6 Part III, Section II, Item 2.14.

Text not changed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

The second sentence should be amended to address the crew member and the air operator.

Air operators and crew members must ensure sufficient time and rest periods to …..overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.

Reason

Response

Air operators are addressed in paragraph 8.f.

Text not changed.

Paragraph ***and 7.f***

Cmt. ***164 / Eurocopter***

Comment

PARAGRAPH
Annex 2 paragraphs (7)
In the subparagraphs (7.e) and (7.f) the term "crew member" seems to deal with only flight crew member (related to subparagraphs 7.a and 7.c) and cabin crew member (related to subparagraph 7.b). Especially in the helicopter operations, there are other persons assigned by an operator to duty on a helicopter during a flight duty period such as during hoist or HEMS operations. The term "crew members" needs therefore to be specifically defined.

Reason

Response

Paragraph 7.e and 7.f is assumed to cater for all crew members as stipulated in 7.a.

Text not changed.

8.a

Paragraph

Cmt. ***212 / CAA, UK***

Comment

Explain/define the term "Operation for commercial purposes and the operation of large aircraft".

Reason

A clear definition of the terms "Operation for commercial purposes and the operation of large aircraft" is needed, as this is no consistent with terms used in (EC)1592/2002 and (EC)2042/2003.

Response

Operation for commercial purposes and the operation of large aircraft will be defined in the basic regulation along with those already existing in Article 3.

Text not changed.

Cmt. ***214 / CAA, UK***

Comment

These sections contain both essential requirements and implementing rules, this gives too much detail in the essential requirements and restricts the ability of the implementing rules to be flexible.

Reason

For example: Paragraph 6c, 6e, 6g and first sentence of 6f are considered implementing rule material.

Response

In relation to section 8, the comment is too general to allow for proper analysis.

Text not changed.

Cmt. ***217 / CAA, UK***

Comment

Several references are made to the procedures to be adopted for the oversight of the Continuing Airworthiness, which are in general complementary to the provisions of Part M. It seems unusual to refer to such procedures in these Essential Requirements when they are only part of the Implementing Rules of another regulation. The UK CAA recommends that the Essential Requirements for Operations merely make reference to the provisions of Part M in respect of Continuing Airworthiness and goes into no further detail than to require that the aircraft be maintained in an airworthy condition (paragraph 6a), and that the operation must be conducted in accordance with the provisions of Part M (paragraph 8a).

Reason

Avoidance of potential for conflicting interpretations, if ER Ops and Part M are not exactly harmonised.

Response

In principle the statement is correct, Commission Regulation (EC) 2042/2003 will cater for the implementing measures linked t this paragraph. But it is not possible to refer to a Commission Regulation in a Parliament and Council Regulation.

Text not changed.

Cmt. ***240 / CAA, UK***

Comment

This Chapter should be deleted in entirety.

Chapter 8 appears to have been developed on the assumption that essential requirements change above a certain (undefined) size threshold. This is not the case: the essential requirements for safe air operations are the same for all aircraft, irrespective of size - it is the implementation means that change to take into account, e.g. the purpose of flight (required level of safety), size of operation (number of aircraft), size of aircraft, type of aircraft, route complexity etc. It is wrong to assume that the operational requirements for, e.g. a small aerial photography operation, or a corporate operator with one or two aircraft, will need to be the same as those for a commercial air transport undertaking.

Inclusion of many of the specific requirements being proposed here would create exactly the same shortcoming that made the use of ICAO Standards unacceptable as the basis for the Essential Requirements - it results in a combination of basic principles, essential requirements and implementation means. To include implementation means in this way within the ERs does not facilitate the development and refinement of appropriate Implementing Rules, but has the effect of prejudging and pre-empting the IR material.

Some specific objections to this chapter and the associated explanatory note are detailed in the attachments to this sheet.

Explanatory note paragraph 45:
This states that commercial operations have higher associated risk levels as a result of commercial pressures. It has not been stated, conversely, that corporate operations have proved to have generally lower risk levels. Since customers of commercial operators are unable to evaluate the risks, it has been suggested here that it is "legitimate that the legislator takes over responsibility" by mandating more stringent safety requirements. This is fundamentally incorrect - responsibility for achieving safe operations remains with the operator, whereas the role of the legislator is to facilitate this by ensuring there is in place an appropriate regulatory framework. To be effective that framework depends on the development and refinement of effective implementing rules. In drafting this chapter, certain assumptions have been made about what those implementing rules should contain;
- assumptions that may or may not be correct.

Explanatory note paragraph 46:
This states that an organisation is needed to operate and maintain large aircraft because they tend to be more complex. Helicopters also tend towards complexity yet, significantly, it has not been suggested that an organisation is always needed to operate a helicopter. In reality, the level of organisation that may be appropriate can be dependent on more than one factor, i.e. although size of aircraft may be a consideration, size of operation (number of aircraft), numbers of crew employed, type of aircraft, route complexity etc also need to be considered. This emphasises the general point that it is wrong to specify means of compliance within the ERs.

Explanatory note paragraph 48:
It is suggested, in explaining the intent of paragraph 8.a, that all commercial and large aircraft operations are of a complexity that requires "high performance quality management systems covering procedures, training programmes, continuing airworthiness, incident analysis, accident prevention so as to promote a real safety culture". Whilst all of this may be true for larger scale operations, it is patently not the case where minor commercial air transport or minor aerial work undertakings are concerned. It would be similarly inappropriate to require this for, e.g. a corporate operation with one or two aircraft. The assumption that quality management systems are effective in promoting a real safety culture is not universally supported and there is a body of informed opinion that considers Safety Management Systems more effective in this regard. This emphasises the general point that it is wrong to specify means of compliance within the ERs. To assume a requirement for a quality system within the ERs does not facilitate the development and refinement of appropriate Implementing Rules, but has the effect of prejudging and pre-empting the IR material.

8.a Explain/define the item 'Operation for commercial purposes and the operation of large aircraft'.

8.a.3 Disagree with the proposition that an MEL is always required in order that a flight may take place. The presence or absence of an MEL is of no significance in the case of a fully serviceable aircraft, therefore its existence cannot be considered an essential requirement for a flight to take place.

Justification: To specify in the ERs that a Minimum Equipment List (MEL) must be established in all cases would have the effect of prohibiting flight by a large aircraft with all items serviceable, on the basis that there was no MEL. This subject should be addressed in appropriate implementing rules.

8.a.3 Third bullet: The meaning of "… the operator's aircraft definition" is not understood.

8.a.4 A management system is an example of an implementation means for ensuring compliance with these ERs. This proposed requirement is too onerous, e.g. for minor aerial work operations, to which this would apply as they are conducted for commercial purposes. In view of the diversity of sizes and types of operation, it is considered that any requirement for a management system is a matter for the Implementing Rules to define.

Justification: Implementation means should not be included in the ERs. The requirement is too onerous for many operations.

8.a.5 This paragraph does not make sense: " it must establish an occurrence reporting, [programme] which must…"

8.b An operations manual is an example of an implementation means. It may be that an operations manual is required for all these types and sizes of operation. It is also possible that some minor operations require only particular parts of an operations manual; or a simple SOP; or a Personal Minimums Checklist. In view of the diversity of sizes and types of operation, it is considered that operations manual requirements are properly a matter for the Implementing Rules.

Justification: Implementation means should not be included in the ERs. The requirement is too onerous for many operations.

8.b Last sentence: The meaning of "… must mirror the approved flight manual" is not clear.

8.d First bullet: This is probably not relevant to corporate operations.

Justification: Passengers on corporate aircraft are not drawn from the general public but are people with a known connection to the company.

8.d Last sentence: "When security measures may adversely affect the safety of operations, appropriate equipment must be fitted on board and procedures developed to mitigate the related risk." The meaning of this sentence is not understood.

8.e Disagree with the proposition that the essential requirements in relation to the pilot-in-command should be different in this area. Inclusion of this paragraph would suggest that it is not important to designate the pilot-in-command on flights for other than commercial purposes/for operation of large aircraft. This is not the case: the essential requirements for safe air operations are the same for all aircraft. The second sentence is in any case a repetition of 1.d.

Justification: The essential requirements for safe air operations are the same for all aircraft, regardless of size.

8.g This appears to detail implementation means of an organisation established specifically for carrying out the system specified in 8.a.4, which paragraph was also objected to as it specified implementation means.

Justification: Implementation means should not be included in the ERs. The matters being addressed are the requirements for maintenance, which should be addressed elsewhere.

8.g Fourth bullet : This paragraph does not make sense.

- END OF ATTACHMENTS TO COMMENT ON ANNEX 2 CHAPTER 8 -

Reason

Response

General: Commercial activities should always be safe. All commercial activities should be addressed in the same manner at Essential Requirement level. Of course at the Implementing rule level there may be differences to cater for specific issues. Furthermore, large aircraft do pose a greater risk to society and therefore also need to be addressed. As to certification rules do differ, this is possible.

These Essential Requirements are not as specific as ICAO SARPs. They were felt by the core group to be the proper way of mitigating the main risks.

Explanatory note paragraph 45, 46 and 48: Comment noted.

Comment on 8.a: Operation for commercial purposes and the operation of large aircraft will be defined in the basic regulation along with those already existing in Article 3.

Comment on 8.a.3: The MEL is an ICAO Annex 6 recommendation. It is necessary to have this in the essential requirement in order to develop implementing rules. Furthermore for large aircraft, certified to CS 25 for instance, there is an MMEL hence it is easily possible to develop an MEL.

Text changed but not as proposed.

Comment on 8.a.3: The word definition is not appropriate and should be removed.

Text changed.

Comment on 8.a.4: This is the standard paragraph used in Regulation (EC) 1592/2002 for organisational approvals. This of course will be developed in IR to suit the different types of operators.

Text not changed.

Comment on 8.a.5: Comment accepted.

Text changed.

Comment on 8.b: This is the standard paragraph used in Regulation (EC) 1592/2002 for organisational approvals. This of course will be developed in IR to suit the different types of operators.

Text not changed.

Comment on 8.b: The text has been changed to help its understanding.

Text changed.

Comment on 8.d: Corporate aircraft can also be hijacked.

Text not changed.

Comment on 8.d: The last paragraph caters for cases where the security measures could in certain cases pose a safety problem. These need to be detected and the proper action needs to be taken.

Text reworded.

Comment on 8.e: There is a differnce. In this case, the operator designates the pilot in command. But the second sentence is a repetition and needs to be deleted.

Text changed.

Comment on 8.g:This is the standard paragraph used in Regulation (EC) 1592/2002 for organisational approvals. This of course will be developed in IR to suit the different types of operators. Fourth bullet point needs to be changed.

Text changed.

Cmt. ***338 / British Airways Plc***

Comment

8. h (new)
Propose to add in paragraph 8 (partially dedicated to commercial operators): "Tasks assigned to a commander in other sections of these E. R. may be delegated to other units within the organization of a commercial operator using appropriate procedures."

Reason

Response

In accordance with ICAO Annex 6 the ultimate responsibility lies with the pilot in command.

Text not changed.

Cmt. ***429 / AEA***

Comment

8. h (new)
Propose to add in paragraph 8 (partially dedicated to commercial operators): "Tasks assigned to a commander in other sections of these E. R. may be delegated to other units within the organization of a commercial operator using appropriate procedures."

Reason

Response

In accordance with ICAO Annex 6 the ultimate responsibility lies with the pilot in command.

Text not changed.

Cmt. ***690 / MOT Germany***

Comment

2.1 Replace the terms " … and operation of large aircraft … " in the title of Chapter 8 with " … and aerial work".

Amend the text in Chapter 8 accordingly by deleting the references to (non-commercial) operation of large aircraft and introducing a reference to aerial work operations.

2.2 Move paragraph 7.e and paragraph 8.f, dealing with FTL issues into one single paragraph 9 "Prevention of fatigue by operators and flight crews" (see our detailed comments on paragraphs 7.e and 8.f on a separate commenting sheet above).

Reason

We agree to the application of the proposed essential requirements in Chapter 8 for commercial operators, and support their application on aerial work operations also. However, we feel the need for differentiating between commercial and non-commercial operations (i.e. corporate operations, private flying). We therefore propose to not applying the same rules on commercial operators and non-commercial operations of Large Aircraft, but to handle commercial operations and aerial work on the same regulatory level.
The proposed requirements in Chapter 8 ask for the application of similar rules for commercial operations and the operations of Large Aircraft without providing a thorough justification. In addition, the involvement of the national authority in the approval/certification process of the operator when showing compliance with the proposed essential requirements and associated implementing rules is not clear. It is obvious that for commercial air transport operators, the Authority needs to be actively involved in approving i.e. the operations manual, the MEL and other operational issues, as required by the corresponding ICAO Standards. This circumstance needs to be reflected in the essential requirements in order to provide a legal basis for the corresponding implementing rules.

However, for non-commercial operations, the picture is quite different, as shown in ICAO Annex 6, Part II. Consequently, issues such as the handling of MELs and operations manuals should be dealt with on a voluntary basis. This needs to be mirrored in the essential requirements, by removing all references dealing with the operations of Large Aircraft. We feel that the proposed text, except paragraph 8, sufficiently cover the regulatory needs for non-commercial operations.

The intent of the proposed essential requirements is more restrictive than the Standards in ICAO Annex 6, Part II as shown in some of the examples below:

MEL requirements

Where ICAO Annex 6, Part I asks for a MEL for commercial operations (which needs to be approved by the Authority), Annex 6, Part II does not require a MEL for non-commercial operators. It is also not clear if the MEL required in paragraph 8.a.3 needs to be approved by the Authority. We feel that this needs to be clarified in the essential requirements in the proposed paragraph 8.a.3.

Occurrence reporting

Whereas ICAO asks for a occurrence reporting system (and a quality system) for commercial operators, Annex 6, Part II does not contain a similar requirement for non-commercial operations. Hence, the proposed essential requirement should not be applied to non-commercial operations.

Operations Manual

An Ops Manual should be required for commercial operations and aerial work operators, but not for non-commercial operators.

Response

Paragraph 2.1.: Commercial activities should always be safe. All commercial activities should be addressed in the same manner at Essential Requirement level. Of course at the Implementing rule level there may be differences to cater for specific issues. Furthermore, large aircraft do pose a greater risk to society and therefore also need to be addressed. As to certification rules do differ, this is possible.

Paragraph 2.2.: Both paragrahs 7.e and 8.f are needed as there is a difference in responsibility.

Text changed but not as proposed.

Paragraph

Cmt. ***459 / ERA***

Comment

8. Operation for commercial? purposes and operation of large? aircraft
8.a The operation for commercial purposes and the operation of large aircraft must not be undertaken unless the operator meets the following conditions:

There is a need to define the two terms – Commercial and Large – even if it is by reference to another document.

Reason

- Unless a proper definition is pinpointed Commercial could refer to a wide-range of operations, including sports, aerial, corporate, fractional etc.
- Similarly Large needs defining; is it over 5,700kg and/or nineteen seats? Or what?

Response

The definitions shall be put in the Basic Regulation article 3.

Text not changed.

Cmt. ***691 / MOT Germany***

Comment

If our comments on Chapter 8 above cannot be considered, which means that Chapter 8 will address commercial operators and operators of Large aircraft the following is proposed:

Include definition for "large aircraft" from Commission regulation 2042/2003 and define "commercial purposes" as any activity under the Council regulation 2407/92.

Reason

The definition of "commercial purposes" and "large aircraft" is not yet included in the regulation. Therefore, some need is felt for the inclusion of a corresponding definition by making use of Commission regulation 2042/2003 the Council regulation 2407/92. The inclusion of other kinds of operation into this definition should be considered to cover the intent of Part-M.A.201 (i).

Response

The definitions shall be put in the Basic Regulation article 3.

Text not changed.

Cmt. ***828 / LBA***

Comment

2.1 Replace the terms " … and operation of large aircraft … " in the title of Chapter 8 with " … and aerial work".

Amend the text in Chapter 8 accordingly by deleting the references to (non-commercial) operation of large aircraft and introducing a reference to aerial work operations.

2.2 Move paragraph 7.e and paragraph 8.f, dealing with FTL issues into one single paragraph 9 "Prevention of fatigue by operators and flight crews" (see our detailed comments on paragraphs 7.e and 8.f on a separate commenting sheet above).

Reason

We agree to the application of the proposed essential requirements in Chapter 8 for commercial operators, and support their application on aerial work operations also. However, we feel the need for differentiating between commercial and non-commercial operations (i.e. corporate operations, private flying). We therefore propose to not applying the same rules on commercial operators and non-commercial operations of Large Aircraft, but to handle commercial operations and aerial work on the same regulatory level.

The proposed requirements in Chapter 8 ask for the application of similar rules for commercial operations and the operations of Large Aircraft without providing a thorough justification. In addition, the involvement of the national authority in the approval/certification process of the operator when showing compliance with the proposed essential requirements and associated implementing rules is not clear. It is obvious that for commercial air transport operators, the Authority needs to be actively involved in approving i.e. the operations manual, the MEL and other operational issues, as required by the corresponding ICAO Standards. This circumstance needs to be reflected in the essential requirements in order to provide a legal basis for the corresponding implementing rules.

However, for non-commercial operations, the picture is quite different, as shown in ICAO Annex 6, Part II. Consequently, issues such as the handling of MELs and operations manuals should be dealt with on a voluntary basis. This needs to be mirrored in the essential requirements, by removing all references dealing with the operations of Large Aircraft. We feel that the proposed text, except paragraph 8, sufficiently cover the regulatory needs for non-commercial operations.

The intent of the proposed essential requirements is more restrictive than the Standards in ICAO Annex 6, Part II as shown in some of the examples below:

MEL requirements

Where ICAO Annex 6, Part I asks for a MEL for commercial operations (which needs to be approved by the Authority), Annex 6, Part II does not require a MEL for non-commercial operators. It is also not clear if the MEL required in paragraph 8.a.3 needs to be approved by the Authority. We feel that this needs to be clarified in the essential requirements in the proposed paragraph 8.a.3.

Occurrence reporting

Whereas ICAO asks for a occurrence reporting system (and a quality system) for commercial operators, Annex 6, Part II does not contain a similar requirement for non-commercial operations. Hence, the proposed essential requirement should not be applied to non-commercial operations.

Operations Manual

An Ops Manual should be required for commercial operations and aerial work operators, but not for non-commercial operators.

Response

Paragraph 2.1.: Commercial activities should always be safe. All commercial activities should be addressed in the same manner at Essential Requirement level. Of course at the implementing rule level there may be differences to cater for specific issues. Furthermore, large aircraft do pose a greater risk to society and therefore also need to be addressed. As to certification rules do differ, this is possible.

Paragraph 2.2.: Both paragrahs 7.e and 8.f are needed as there is a difference in responsibility.

Text changed but not as proposed.

Cmt. *829 / LBA*

Comment

If our comments on Chapter 8 above cannot be considered, which means that Chapter 8 will address commercial operators and operators of Large aircraft the following is proposed:

Include definition for “large aircraft” from Commission regulation 2042/2003 and define “commercial purposes” as any activity under the Council regulation 2407/92.

Reason

The definition of “commercial purposes” and “large aircraft” is not yet included in the regulation. Therefore, some need is felt for the inclusion of a corresponding definition by making use of Commission regulation 2042/2003 the Council regulation 2407/92. The inclusion of other kinds of operation into this definition should be considered to cover the intent of Part-M.A.201 (i).

Response

The definitions shall be put in the Basic Regulation article 3.

Text not changed.

Cmt. *1208 / LFV Sweden*

Comment

Change the title to read: “Additional requirements for operations …”

Reason

The preceding paragraphs apply to any type of operation, so para 8 contains additional requirements.

Response

Comment accepted.

Title changed.

Cmt. *1373 / Civil Aviation Administration FINLAND*

Comment

There should be in the Essential Requirements or in the EC Regulation a clear requirement, that the commercial air operator must hold an Air Operator Certificate (AOC) and have an approved organization and Operations Manual (OM), if the operator is flying commercial air transport or commercial aerial work.
The operator conducting commercial air transport shall have also an Operating Licence, as required in EC Regulation (EEC) No 2407/92.

Reason

ICAO Annex 6, EC Regulation (EEC) No 2407/92 and JAR-OPS 1 and 3.

Response

This issue will be addressed in the Basic Regulation. These Essential Requirements serve as technical rules. An AOC is only a way of materialising the compliance.

Text not changed.

Cmt. *1398 / FAA USA*

Comment

Perhaps a matter of semantics: (Change underlined)
8.a The operation for commercial purposes and the operation of large aircraft must not be undertaken unless the following conditions are met::
8.a.1 The operator must …
8.a.2 The operator must …
8.a.3 The operator must … etc.,

Reason

Response

Comment accepted.

Text changed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

. Operation for commercial purposes and operation of large aircraft
Title: The Netherlands is unfamiliar with the term large aircraft and would prefer a differentiation based on the certification category of the aircraft used e.g. certified in the transport category.

Does the EASA refer to the definition of large aircraft in Part 2042/2003 on continuing airworthiness where large is defined as more than 5700 kg?

Reason

Response

The definitions shall be put in the Basic Regulation article 3.

Text changed but not as proposed.

Paragraph ***1***

Cmt. ***43 / CAA Belgium***

Comment

These means comprise but are not limited to the following: facilities, personnel, equipment, documentation of tasks, responsibilities and procedures, access to relevant data and record keeping;

Proposed text:
8.a.1 […]. These means comprise but are not limited to the following: aircraft, facilities, personnel, equipment, documentation of tasks, responsibilities and procedures, access to relevant data and record keeping;

Reason

we would not certify a commercial operator who has no aircraft and who has to lease another one for each flight. Content of the operations manual is dependant of the type of aircraft operated. The manual can not be accepted if the aircraft is not specified.

Response

Comment accepted.

Text changed.

Paragraph ***4***

Cmt. ***44 / CAA Belgium***

Comment

it must implement and maintain a management system to ensure compliance with these essential requirements for continuing airworthiness and aim for continuous improvement of this system; and

Proposed text:
8.a.4 it must implement and maintain a management system to ensure compliance with the essential requirements for continuing airworthiness [and their implementing rules] and aim for continuous improvement of this system; and

Reason

The operator must ensure compliance with all essential requirements : for OPS, FCL and Maintenance & certification

Response

This text is the same as that used for other organisational approvals in 1592/2002. The reference to implementing rules is implicit.

Text not changed.

Paragraph *5*

Cmt. *45 / CAA Belgium*

Comment

it must establish an occurrence reporting, which must be used by the management system in order to contribute to the aim of continuous improvement of the safety of products parts and appliances.

Proposed text:
8.a.5 it must establish an occurrence reporting system, which must be used by the management system in order to contribute to the aim of continuous improvement of the safety of products parts and appliances and the operation thereof.

Reason

This is OPS essential requirements, isn't it?

Shouldn't the directive be withdrawn if a Commission regulation on occurrence reporting comes into force?

Response

Comment accepted.

Text changed but not as proposed.

Paragraph *8*

Cmt. *49 / CAA Belgium*

Comment

8. Operation for commercial purposes and operation of large aircraft

Comment: missing requirement

Proposed text : During any commercial air transportation flight, no emergency situation shall be simulated.

Reason

JUSTIFICATION:

ICAO ?
jar-ops 1.370

Response

Comment accepted.

Text changed.

Cmt. *459 / ERA*

Comment

8. Operation for commercial? purposes and operation of large? aircraft
8.a The operation for commercial purposes and the operation of large aircraft must not be undertaken unless the operator meets the following conditions:

There is a need to define the two terms – Commercial and Large – even if it is by reference to another document.

Reason

- Unless a proper definition is pinpointed Commercial could refer to a wide-range of operations, including sports, aerial, corporate, fractional etc.
- Similarly Large needs defining; is it over 5,700kg and/or nineteen seats? Or what?

Response

Operation for commercial purposes and the operation of large aircraft will be defined in the Basic Regulation along with those already existing in Article 3.

Text not changed.

8.a.1

Paragraph

Cmt. ***538 / IFALDA***

Comment

8.a.1 it must have directly or indirectly through contracts the means necessary for the scale and scope of the operations. These means comprise but are not limited to the following: facilities, personnel, equipment, documentation of tasks, responsibilities and procedures, access to relevant data and record keeping; The operator shall have an effective operational control system which can communicate with and monitor each flight.

Reason

If there is no effective operational control system required, then accidents/incidents will continue as the operator will not be able to provide appropriate support during bad weather, ATC problems, facility problems and for fuel planning purposes.

Response

This is addressed in paragraph 8.a.4.

Text not changed.

Cmt. ***1209 / LFV Sweden***

Comment

1. Delete "directly or indirectly through contracts". In the fourth line, insert "management organisation". The text will then read: "… but are not limited to the following: management organisation, facilities, personnel, equipment …"
2. Insert a new paragraph: "The operator, its organisation and its key personnel must be approved by the Member State. For commercial air transport operations the approval shall be in the form of an Air Operator Certificate (AOC) with appropriate specifications.

Reason

1. The remaining wording caters for flexibility in relation to the scale and scope of the operations. The IR are likely to give more details as to the flexibility. The deleted words invite to the creation of virtual organisations. The requirement for a management organisation belongs here where most of the key factors mentioned.
2. The AOC or an equivalent document is a ICAO requirement.

Response

Point 1: This comment is now addressed in the revised item 8.a.4.

Point 2: This issue will be addressed in the Basic Regulation. These Essential Requirements serve as technical rules. An AOC is only a way of materialising the compliance. Furthermore, the responsibility of the operator will be addressed in the Basic Regulation.

Text not changed.

Cmt. ***1374 / Civil Aviation Administration FINLAND***

Comment

Delete "directly or indirectly through contracts".
In the forth line, insert management organisation. The text will the read… following: management organisation, facilities, …

Reason

The remaining wording caters for flexibility in relation to the scale and scope of the operations. The IRs are likely to give more details as to the flexibility.
The deleted words invite to the creation of virtual organisations, which have been found to be a serious problem when these virtual operators does not take care of their economical responsibilities. The requirement for a management organisation belongs here, where most of the key factors are mentioned.

Response

This comment is now addressed in the revised item 8.a.4. The control of these contracts is part of the management system as is the management personnel. Furthermore, the responsibility of the operator will be addressed in the Basic Regulation.

Text not changed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

8a1 change the word 'ít' to 'the operation'.

Reason

=the addressee of this requirement is unclear.

Response

Comment accepted.

Text changed but not as proposed.

8.a.2

Paragraph

Cmt. ***539 / IFALDA***

Comment

8.a.2 it must implement and maintain training and checking programmes for the relevant personnel, both flight and ground, including flight dispatchers and maintenance technicians.

Reason

At present, in Europe, flight dispatchers, where they exist, are seldom trained. It is mostly a week or two of "on the job" training with no specific structured requirements. Without the necessary training the function is ineffective. It is too important a safety factor for this to continue. It should be required that this apply to all personnel, both flight and ground, including flight dispatchers. Maintenance technicians are also a key function and should be included.

Response

Relevant personnel may include flight dispatchers. The detail will be developed in an implementing rule.

Text not changed.

Cmt. ***1210 / LFV Sweden***

Comment

Amend the test to read: "…checking programmes for crew members and other relevant personnel".

Reason

To make it absolutely clear that this requirement for the operator also refers to pilots in addition to any requirement formulated for licensing purposes.

Response

Comment accepted.

Text changed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

change the word 'ít' to 'the operation'.

Reason

=the addressee of this requirement is unclear.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1597 / DGAC***

Comment

Modifier le paragraphe comme suit :
« il doit s'assurer de la compétence des personnels impliqué dans les opérations et mettre en place et maintenir des programmes de formation et de contrôle pour le personnel concernépériodiques des personnels navigants»

Reason

Les règles actuelles n'ont pas le même niveau d'exigences pour les personnels navigants (sous–parties N et O du JAR-OPS) et pour les autres personnels d'exploitation (JAR-OPS 1.205)

Response

Comment accepted.

Text changed.

8.a.3

Paragraph

Cmt. *94 / Mrs. S. Doherty Chairman JAA MMEL/MEL WG*

Comment

COMMENT:
It must establish a means of dispatching an aircraft with inoperative equipment, under specified conditions, at the commencement of flight.

Reason

It states that the operator must establish a MEL. However, the operator may wish to operate with all systems and equipment fully serviceable, so why should they be forced to write an MEL? For example, the operator of an aircraft may wish to operate private flights only, with a fully serviceable aircraft at all times – in this case there is no need for an MEL.

The current text is too detailed for an ER and is much more suitable for the IR. The ER should state the high-level requirement which is to allow an aircraft to dispatch with unserviceabilities (inoperative equipment). The IR should then detail what the MEL should be based on (i.e. the appropriate MMEL) and that the MEL shall not be less restrictive than the MMEL. The IR can also go into more detail about tailoring the MEL to take account of the operator's aircraft definition and the relevant operational and maintenance conditions.

Response

Comment accepted in general.

Nonetheless, in order to ensure legal certainty, Essential Requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text changed.

Cmt. *331 / British Airways Plc*

Comment

British Airways suggests 8.a.3 is amended to read:
"As a means of determining whether an aircraft may dispatch with inoperative equipment under certain conditions, it must establish a Minimum Equipment List (MEL)

Reason

The requirement that the MEL is no less restrictive than the MMEL is too detailed for the ER, but should be stated in the IR. The IR could go into the detail of how to establishing a MEL to meet the ER as well as detailing other requirements related to the MMEL.

Response

In order to ensure legal certainty, essential requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. *422 / AEA*

Comment

The AEA request to rewrite 8.a.3 to read as
"As a means of determining whether an aircraft may dispatch with inoperative equipment under certain conditions, it must establish a Minimum Equipment List (MEL)

Reason

The requirement that the MEL is no less restrictive than the MMEL is too detailed for the ER, but should be in the IR. Then the IR could go into the detail of establishing an MEL to meet this top level rule, along with other requirements related to the MMEL

Response

In order to ensure legal certainty, Essential Requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. *589 / EASA/Technical Committee*

Comment

Why "must"? "May" should be sufficient here, as this essential requirement actually is an alleviation.

Reason

Response

The use of the word "must" reflects an existing industry standard.

Text changed but not as proposed.

Cmt. ***812 / Airbus***

Comment

Replace the whole paragraph 8.a.3 by:

As a means of determining whether an aircraft may dispatch with inoperative equipment under certain conditions, it must establish a Minimum Equipment List (MEL).

Reason

The requirement that the MEL is no less restrictive than the MMEL is too detailed for the Essential Requirements, but should be in the implementing rules. Then, derived from JAR-OPS 1(or 3).030 and JAR-MMEL/MEL, the implementing rules and related AMC/GM could go into the details of establishing an MEL, along with requirements and guidance related to the MMEL.

Response

In order to ensure legal certainty, Essential Requirements have to provide an adequate level of detail containing basic means of compliance necessary for adoption of implementing rules. Lack of details could be considered as missing legal basis for establishment of implementing rules.

Text not changed.

Cmt. ***1211 / LFV Sweden***

Comment

This subparagraph must be kept as a future IR-text. If the para is to be kept nevertheless, the wording of the third bullet point must be changed to read: "... must be prepared for each individual aircraft."
Furthermore, the wording "aircraft definition" must be deleted.

Reason

More suitable as IR, Each individual aircraft is the commonly used expression. Aircraft definition is not understood and is likely to cause confusion.

Response

Comment accepted.

Text changed.

Cmt. ***1375 / Civil Aviation Administration FINLAND***

Comment

This subparagraph should be kept as a future IR text. If the paragraph is to be kept nevertheless, the wording of the third bullet point should be changed to read: …must be prepared for each individual aircraft.
Further more delete "aircraft definition".

Reason

More suitable as IR. Each individual aircraft is the commonly used expression. Aircraft definition is not understood and is likely to cause confusion.

Response

Comment accepted.

Text changed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

change the word 'ít' to 'the operation'.

Reason

the addressee of this requirement is unclear.

Response

Comment accepted.

Text changed but not as proposed.

8.a.4

Paragraph

Cmt. *213 / CAA, UK*

Comment

"it must implement and maintain a management system to ensure compliance with the essential requirements for continuing airworthiness in accordance with Part M subpart G".

Reason

The essential requirements for continuing airworthiness are already established therefore there should be a link to article 5 of the basic regulation and Part M.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *332 / British Airways Plc*

Comment

8.a.4 British Airways proposes that the first sentence states:
"it must implement and maintain a management system to ensure compliance with these essential requirements for continuing airworthiness (1) and aim for continuous improvement of this system; ... ".

Also clarification as to the intent of the phrase 'aim for continuous improvement of this system' is required. There appears to be no reference in the proposed E.R. for a Quality and Safety Management Systems. (2)

Reason

(1) printing error? (editorial)
(2) Clarification

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *423 / AEA*

Comment

8.a.4 The first sentence should read
"it must implement and maintain a management system to ensure compliance with these essential requirements for continuing airworthiness (1) and aim for continuous improvement of this system; ... ".

What is meant with 'aim for continuous improvement of this system'? There seem to be no reference in the proposed E.R. to quality and safety management systems. (2)

Reason

(1) printing error? (editorial)
(2) Clarification

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *692 / MOT Germany*

Comment

Amend wording to read:

"It must implement and maintain a continuing airworthiness management organisation to ensure compliance with these essential requirements for continuing airworthiness for any kind of commercial operation and contract such an organisation in the case of operation of large aircraft."

Reason

The new text makes the requirement compliant with Part-M.A.201 (g) and (h) respectively and makes the intention of the paragraph more clear in respect of the requirements of paragraph 8.g.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***813 / Airbus***

Comment

It must implement and maintain a management system to ensure compliance with these essential requirements for continuing airworthiness operations and aim for continuous improvement of this system; and

Reason

Referring to the explanatory note (paragraph 48), we understand that the required quality system must cover all aspects of operations, and not only continuing airworthiness. In addition, the quality requirements for continuing airworthiness management are addressed in paragraph 8.g.

Response

Comment accepted.

Text changed.

Cmt. ***830 / LBA***

Comment

Amend wording to read:

"It must implement and maintain a continuing airworthiness management organisation to ensure compliance with these essential requirements for continuing airworthiness for any kind of commercial operation and contract such an organisation in the case of operation of large aircraft."

Reason

The new text makes the requirement compliant with Part-M.A.201 (g) and (h) respectively and makes the intention of the paragraph more clear in respect of the requirements of paragraph 8.g.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1212 / LFV Sweden***

Comment

Change the paragraph to read: "it must implement and maintain a safety management system … /…/ … essential requirements for continuing airworthiness and aim for continuous improvement of the safety standards; and"

Reason

This paragraph can obviously not deal specifically with airworthiness standards since they are intended to be covered in para 8.g. The mentioning of a safety management system is crucial but it appears to have been left out otherwise.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1376 / Civil Aviation Administration FINLAND***

Comment

Change the paragraph to read: it must implement and maintain a safety management system ….essential requirements for continuing airworthiness and aim for continuous improvement of the safety standards.

Reason

This paragraph can obviously not deal specifically with airworthiness standards, since they are intended to be covered in paragraph 8.g. The mentioning of a safety management system is crucial, but it appears to have been left out otherwise.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

change the word 'ít' to 'the operation'.

Reason

the addressee of this requirement is unclear.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1531 / MOT/PW&WM NL***

Comment

8 A 4 requirements for continuing airworthiness and aimed for…. Should be replaced by the wording 'requirements for operations and aimed for continuous improvement of the system.

Reason

editorial error.

Response

Comment accepted.

Text changed.

Cmt. ***1597 / DGAC***

Comment

Modifier le paragraphe comme suit :
« il doit mettre en œuvre et maintenir un système de gestion de la sécurité afin d'assurer la conformité à ces exigences essentielles pour le maintien de la navigabilité et viser à une amélioration perpétuelle de ce système »

Reason

Si un système de gestion doit être requis, il ne doit pas l'être que pour le seul maintien de navigabilité, qui par ailleurs est couvert par le règlement 2042/2003, mais pour l'ensemble de l'exploitation.

Response

Comment partially accepted. Safety manamgement system may not be mandatory in all cases.

Text changed but not as proposed.

8.a.5

Paragraph

Cmt. ***333 / British Airways Plc***

Comment

8.a.5 (also 8.g, 4th bullet)
British Airways suggest that the first sentence should read: " ... it must establish an occurrence reporting system, which must be ... ".

Reason

Printing error? (editorial)

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***424 / AEA***

Comment

8.a.5 (also 8.g, 4th dot)
First sentence should read: " ... it must establish an occurrence reporting system, which must be ... ".

Reason

Printing error? (editorial)

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***457 / ERA***

Comment

8.a.5 it must establish an occurrence reporting system for use by all employees, which must be used by the management system in order to contribute to the aim of continuous improvement of the safety of products parts and appliances and employees.

Reason

• It is worth emphasizing who can use the occurrence reporting system in terms of who makes the reports – this is different from those who use the results of report analyses.
• It is recommended that occurrence reporting systems – although a fundamental part of any safety management programme – should be managed separately from any commercial or operational company management; the independence guaranteeing confidentiality and high rates of return.
• The management system should be obliged to act on the advice, or information, provided by the system, but it is counter-productive to indicate that the management system must use "occurrence reporting".
• The human safety performance element should also be considered in any reporting scheme

Response

Nothing in this paragraph does not limit the persons that can use the occurrence reporting system. The management system normally encludes all employees.

Text changed but not as proposed.

Cmt. ***721 / SNPL / French ALPA***

Comment

8.a.5 at the end of the paragraph
(add) It is essential for the whole chain of safety that the occurrence reporting system garanties no punitive action (legal, administrative or corporate) will be taken.

Reason

Response

The functioning of the system is discribed in the EU Directive on the matter, can be developed in implementing rules.

Text not changed.

Cmt. ***814 / Airbus***

Comment

It must establish and maintain an accident prevention and flight safety programme, including an occurrence reporting scheme, which must be used by the management system in order to contribute to the aim of continuous improvement of the safety of products, parts and appliances operations. The occurrence reporting scheme must include internal reporting, reporting to the competent Authority or to the Agency, and reporting as necessary to the organisations responsible for the design or the maintenance of the involved product, part or appliance.

Reason

The reporting scheme is part of the accident prevention and flight safety programme, which is required in ICAO Annex 6 Part I paragraph 3.2, and Part III section II paragraph 1.1.7. This programme must address operations in general, and not only the products, parts and appliances.

It is essential that knowledge of occurrences be disseminated as appropriate to all safety stakeholders. This aspect is currently addressed in JAR-OPS 1(or 3).420(b).

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1152 / ECA***

Comment

Please add the following new sentence to the end of the paragraph:
'It is essential for the whole safety chain that occurrence reporting systems guarantee no punitive action (legal, administrative or corporate) will be taken. '

Reason

Occurrence reporting should have the unique objective of improving safety.

Response

The functioning of the system is discribed in the EU Directive on the matter, can be developed in implementing rules.

Text not changed.

Cmt. *1213 / LFV Sweden*

Comment

Change the paragraph to read: "… continuous improvement of the safety of the operation including the maintenance activities."

Reason

It appears to be inappropriate to limit the aim of the reporting system to products, parts and appliances.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1377 / Civil Aviation Administration FINLAND*

Comment

Change the paragraph to read: …continuous improvement of the safety of the operation including the maintenance activities.

Reason

It appears to be inappropriate to limit the aim of the reporting system to products, parts and appliances.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1531 / MOT/PW&WM NL*

Comment

change the word 'ít' to 'the operation'.

Reason

the addressee of this requirement is unclear.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1598 / DGAC*

Comment

Modifier le paragraphe comme suit :
« il doit établir un système de compte-rendu d'événementsretour d'expérience qui doit être utilisé par le système de gestion de la sécurité afin de contribuer à l'objectif d'amélioration perpétuelle de la sécurité des produits, des pièces et des appareils»

Reason

La directive 2003/42 ne prévoit un système de compte rendu d'événements que pour les le transport public et les aéronefs à turbine, au niveau des exigences essentielles il vaut sans doute mieux utiliser le terme plus général de retour d'expérience.
Tel que rédigé, le texte pourrait être compris comme ne couvrant que la navigabilité des produits aéronautiques, alors que les systèmes de compte rendu d'événements ont pour but d'améliorer tous les aspects de la sécurité.

Response

Comment accepted.

Text changed but not as proposed.

8.b

Paragraph

Cmt. ***175 / Eurocopter***

Comment

Annex2 § 8.b
In the last sentence, replace “The Operation Manual must mirror” by “The Operation Manual must be established in accordance with”

Reason

The word “mirror” seems too specific and could oblige to have an operational manual with exactly the same format, wording, … than the approved flight manual. In addition the Operation Manual can contain more information than the approved flight manual which, as a minimum, only provides information required by certification. For operation purpose, the Operation Manual can contain dedicated limitations, procedures, performance for specific types of operation. That’s why the word “must be established in accordance with” seems more appropriate, this will permit the regulator to insure that the safety level as guaranteed by certification is not impaired while enough flexibility is given to the operator to define format and information to be inserted in the Operation Manual.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***334 / British Airways Plc***

Comment

British Airways proposes paragraph 8b is amended to state: “The operation for commercial purposes and the operation of large aircraft must only be undertaken in accordance with an operator's Operations Manual. This Operations Manual must contain all instructions, information and procedures covering all aircraft operated and necessary for operations personnel to perform their duties. Limitations applicable to flight time, flight duty periods and rest periods for crew members must be specified. The Operations Manual must mirror be compliant with the approved flight manual and its revisions and be amended as necessary.

Reason

The wording “mirror the approved flight manual” is not appropriate since only Part-B of the operations manual should take into account flight manual data.

Response

Comment accepted.

Text changed.

Cmt. ***425 / AEA***

Comment

The AEA proposes to amend paragraph 8b to read as “The operation for commercial purposes and the operation of large aircraft must only be undertaken in accordance with an operator's Operations Manual. Such manual must contain all instructions, information and procedures covering all aircraft operated and necessary for operations personnel to perform their duties. Limitations applicable to flight time, flight duty periods and rest periods for crew members must be specified. The Operations Manual must mirror be compliant with the approved flight manual and its revisions and be amended as necessary.

Reason

The wording “mirror the approved flight manual” is not appropriate since only Part-B of the operations manual should take into account flight manual data.

Response

Comment accepted.

Text changed.

Cmt. ***540 / IFALDA***

Comment

8.b The operation for commercial purposes and the operation of large aircraft must only be undertaken in accordance with an operator's Operations Manual. Such manual must contain all instructions, information and procedures covering all aircraft operated and necessary for operations personnel to perform their duties. Specific responsibilities must be assigned to the relevant personnel, both flight and ground. Limitations applicable to flight time, flight duty periods and rest periods for crew members and where applicable, duty periods and rest periods for ground personnel, including flight dispatchers must be specified. The Operations Manual must mirror the approved flight manual and its revisions and be amended as necessary.

Reason

IFALDA believes that it is important that specific responsibilities be assigned to each individual assigned to a function with flight /air operations whether in the aircraft or on the ground. This prevents any vagueness and the possibility of confusion, which is important to prevent incidents and accidents. Also, duty times are important not just for flight crew members, but for any person in a critical function, such as flight dispatch, just as many ATC controllers also have a maximum work time and rest period. Fatigue affects response times and decision-making. A minimum rest period should be applied for ground personnel. They must be able to support the flight whenever required, but must be rested in order to do so.

Response

The work and rest periods for ground personnel in Europe are defined through national laws or collective agreements.

Text not changed.

Cmt. ***815 / Airbus***

Comment

The operation for commercial purposes and the operation of large aircraft must only be undertaken in accordance with an operator's Operations Manual. Such manual must contain all instructions, information and procedures covering all aircraft operated and necessary for operations personnel to perform their duties. Limitations applicable to flight time, flight duty period and rest periods for crew members must be specified. The Operations Manual must mirror be compliant with the approved fligh manual and its revisions and be amended as necessary.

Reason

The wording "mirror the approved flight manual" is not appropriate, since the scope of the operations manual is wider than the scope of the flight manual.

Response

Comment accepted.

Text changed.

Cmt. ***1214 / LFV Sweden***

Comment

Change the last sentence to read: "The Operations Manual must not conflict with the Approved Flight Manual, or its equivalent and shall be amended as necessary."

Reason

The existing wording ties the Operations Manual too closely to the lay-out of the AFM/HFM (or Pilot Operating Handbook). In order to be operationally suitable, the layout of the OM must be different with the exception of presentation of the limitations.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***1378 / Civil Aviation Administration FINLAND***

Comment

Change the last sentence to read. The Operations Manual must not conflict with the Approved Flight Manual, or its equivalent and shall be amended as necessary.

Reason

The existing wording ties the Operations Manual too closely to the lay-out of the AFM/HFM (or Pilot Operating Handbook). In order to be operationally suitable, the layout of the OM must be different with the exception of presentation of the limitations

Response

Comment accepted.

Text changed but not as proposed.

8.c

Paragraph

Cmt. ***541 / IFALDA***

Comment

8.c Procedures must be established, by the operator/air carrier as appropriate, so as to minimise the consequences to safe flight operations of disruptive passenger behaviour.

Reason

It should state who is responsible to establish these procedures. The pilot-in-command should not be left on their own with this The operator/air carrier should provide all possible assistance to the flight crew on this issue. The flight dispatcher should be the single point of contact for this and be able to bring all resources of the airline and law enforcement agencies together to help the pilot resolve the problem. In addition, if the flight must be stopped to deal with the disruptive passengers, it should be the flight dispatcher, in cooperation with law enforcement and management to work with the pilot in deciding where the flight should go. Sometimes law enforcement, for example, wants a flight in a particular airport, but this airport may not be suitable for a flight for performance, weather, or other operational reasons. The flight dispatcher would be knowledgeable about this.

Response

Comment noted. It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. ***1121 / ECOGAS***

Comment

8.c This should include the right of the pilot-in-command to refuse boarding to passengers exhibiting indicators for potential disruptive behavior (e.g. intoxication).

Reason

Response

This is covered by this paragraph along with paragraph 7.c.

Text not changed.

Cmt. ***1215 / LFV Sweden***

Comment

Delete the para

Reason

Covered by para 3.g

Response

This paragraph mandates the operator to establish procedures. It is not the case of 3g.

Text changed but not as proposed.

Cmt. ***1379 / Civil Aviation Administration FINLAND***

Comment

Delete the paragraph 8.c.

Reason

Covered by paragraph 3.g.

Response

This paragraph mandates the operator to establish procedures. It is not the case of 3g.

Text changed but not as proposed.

8.d

Paragraph

Cmt. *46 / CAA Belgium*

Comment

Security programmes must be developed and maintained including particularly:
- security of the flight crew compartment;
- [...]

Proposed text:
8.d Security programmes must be developed and maintained including particularly:
- security of the flight crew compartment/remote control station (for UAVs);
- [...]

Reason

self explanatory

Response

For UAVs, the remote control station should be considered as being part of the aircraft.

Text not changed.

Cmt. *335 / British Airways Plc*

Comment

British Airways suggests paragraph 8d is am ended to state:
"Security programmes must be developed and maintained including particularly:
- security of the flight crew compartment;
- aircraft search procedure checklist;
- training programmes;
- protection of electronic and computer systems to prevent intentional system interference and corruption; and,
- Reporting acts of unlawful interference.

When security measures may adversely affect the safety of operations, appropriate equipment must be fitted on board and procedures developed to mitigate the related risk."

Reason

The term 'checklist' in the second bullet should be deleted since in airline documentation the term checklist is different from the meaning of "procedures".

Additionally the requirement on " protection of electronic and computer systems to prevent intentional system interference and corruption;" seems more related to the airworthiness than to operations. The certification criteria should take into account those considerations.

Response

The term checklist is used in many different feilds. It is not a reseved term.

Second comment: The final responsibility of the use of data, be it in paper or electronic format, lies with the operator. Therefore, it is its responsibility to avoid interference and corruption.

Text not changed.

Cmt. *426 / AEA*

Comment

The AEA request to amend paragraph 8d to read as"
Security programmes must be developed and maintained including particularly:
- security of the flight crew compartment;
- aircraft search procedure checklist;
- training programmes;
- protection of electronic and computer systems to prevent intentional system interference and corruption; and,
- Reporting acts of unlawful interference.

When security measures may adversely affect the safety of operations, appropriate equipment must be fitted on board and procedures developed to mitigate the related risk."

Reason

The term 'checklist' in the second dot should be deleted since in airline documentation usually checklist is well distinguished from the meaning of "procedures", and there should not be a mix-up at the E. R. level.

The requirement on "protection of electronic and computer systems to prevent intentional system interference and corruption;" seems more related to the airworthiness than to operations. The certification criteria should take into account those considerations.

Response

The term checklist is used in many different feilds. It is not a reseved term.

Second comment: The final responsibility of the use of data, be it in paper or electronic format, lies with the operator. Therefore, it is its responsibility to avoid interference and corruption.

Text not changed.

Cmt. ***456 / ERA***

Comment

8.d Security programmes must be developed and maintained including particularly:
- security of the flight crew compartment;
- aircraft search procedure checklist;
- training programmes;
- protection of aircraft electronic and computer systems to prevent intentional system interference and corruption; and,
- Reporting acts of unlawful interference.

When security measures may adversely affect the safety of operations, appropriate equipment must be fitted on board and procedures developed to mitigate the related risk.
Security measures should not adversely affect the safety of operations, but when there may be a conflict between safety and security, the risks must be assessed and appropriate procedures developed to mitigate these risks; this may necessitate the use of specialist equipment

Reason

- Need to clarify that the electronic equipment is part of the aircraft and not passenger portable devices.
- It must be made clear that security does not necessarily take precedence over safety, and security measures should be developed which do not impinge on safety. However, in the event, appropriate action must be considered, depending on the risks.
- It is not a "must" that appropriate equipment should be fitted on-board the aircraft

Response

The electronic and computer systems may not be limited only to aircraft.

The last paragraph caters for cases where the security measures could in certain cases pose a safety problem. These need to be detected and the proper action needs to be taken.

t is not a "must" that appropriate equipment should be fitted on-board the aircraft: Comment accepted.

Text changed but not as proposed.

Cmt. ***542 / IFALDA***

Comment

8.d Security programmes must be developed and maintained including particularly:
- security of the flight crew compartment;
- aircraft search procedure checklist;
- training programmes;
- protection of electronic and computer systems to prevent intentional system interference and corruption; and,
- Reporting acts of unlawful interference.
- An air-ground communications with a flight dispatch/flight monitoring system that can provide support to the flight for security issues by the operator/air carrier while it is in-flight.

When security measures may adversely affect the safety of operations, appropriate equipment must be fitted on board and procedures developed to mitigate the related risk.

Reason

The lack of an effective operational control/flight dispatch system leaves the European Community air carriers much more vulnerable to security threats. Most cannot even communicate directly with their flights. How are they going to manage a situation if a 9/11 style attack happens in Europe? The answer is that they could not.

See Attachment.

Attachment ER 8.d

The lack of an effective operational control/flight dispatch system leaves the European Community air carriers much more vulnerable to security threats. Most cannot even communicate directly with their flights. How are they going to manage a situation if a 9/11 style attack happens in Europe? The answer is that they could not. In the US on 9/11, flight dispatchers played a key role in getting all of their flights on the ground rapidly to safe airports. They knew the aircraft's position, its performance, its limitations, any systems problems, like MELs, what airports it could safely land at, what the weather/ATC situation was, and could support each flight accordingly, working as a team with the pilot-in-command. In Europe, that capability simply does not exist. Most European air carriers cannot even communicate with their flights while they are enroute. One can only imagine what would happen if a serious security situation arises. For this reason alone a proper system should be required.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. *816 / Airbus*

Comment

Delete the 4th bullet:
- protection of electronic and computer systems to prevent intentional system interference and corruption; and,

Modify the 5th bullet:
- Protection against and Rreporting acts of unlawful interference.

Reason

As regards intentional interference and corruption into electronic and computer systems (on ground and airborne), the threat and possible mitigating means need to be investigated before possible issuance of a specific requirement.

Intentional interference and corruption into electronic and computer systems fall into the general definition of acts of unlawful interference: "acts which, whether or not they are offences, may or do jeopardize the safety of the aircraft or of persons or property therein or which jeopardize good order and discipline on board". There is no need to go into further details in the essential requirements.

Response

This is a non exhaustive list related to measures against acts of unlawful interference.

Text changed but not as proposed.

Cmt. *1216 / LFV Sweden*

Comment

Change the last sentence to read: "… affect the safety of Ithe operations, appropriate measures must be taken to avoid such risks."

Reason

It is not acceptable to create safety hazards through the implementation of security measures. When balancing safety and security measures, it must be kept in mind that any safety problem introduced will expose every flight to that particular risk, whereas a security flaw will only be significant in case of unlawful activities.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1380 / Civil Aviation Administration FINLAND*

Comment

Change the last sentence to read…affect the safety of the operations, appropriate measures must be taken to avoid such risks.

Reason

It is not acceptable to create safety hazards through the implementation of security measures.

Response

Comment accepted.

Text changed but not as proposed.

8.e

Paragraph

Cmt. *47 / CAA Belgium*

Comment

One pilot amongst the flight crew must be designated as the pilot in command by the operator. The pilot in command is responsible for the safety of all passengers, crew members and cargo on board the aircraft.

Proposed text:
8.e One pilot amongst the flight crew must be designated as the pilot in command by the operator. The pilot in command is responsible for the safety of the flight (including the related ground movements) .

Reason

the safety of the flight must take into account third party and property on ground
the safety of the flight includes third party and property on ground, passengers, crew members, cargo and the aircraft itself.

Response

For the purpose of this regulation related ground movements are regarded as part of the flight.

Text changed but not as proposed.

Cmt. ***309 / British Airways Plc***

Comment

Propose to add a new paragraph 1 b. plus:
Propose to transfer item 8.e to this place with the following wording

"1.b.plus one pilot amongst the flight crew must be designated as the commander".

Reason

Dual pilot operation is not restricted to a commercial environment. Therefore this essential requirement is applicable not only under 8. The second sentence of 8.e is already addressed in 1.d and should be deleted.

Response

This is an obligation on the operator.

Paragraph 1.c has been modified to take into account the second comment.

Text changed but not as proposed.

Cmt. ***336 / British Airways Plc***

Comment

8.e
British Airways proposes to transfer this paragraph to a new place between 1.b and 1.c

Reason

See previous comment re: 1.b. plus (new)

Response

As the proposal to create a new paragraph 1.b was not accepted the text cannot be transferred.

Text not changed.

Cmt. ***400 / AEA***

Comment

Propose to add a new paragraph 1 b. plus:
Propose to transfer item 8.e to this place with the following wording

"1.b.plus one pilot amongst the flight crew must be designated as the commander".

Reason

Dual pilot operation is possible also in a non-commercial environment. So this essential requirement is applicable not only unde
8. The second sentence of 8.e is covered by 1.d already and should be cancelled.

Response

This is an obligation on the operator.

Paragraph 1.c has been modified to take into account the second comment.

Text changed but not as proposed.

Cmt. ***427 / AEA***

Comment

8.e
The AEA proposes to transfer this paragraph to a new place between 1.b and 1.c

Reason

See previous comment re: 1.b. plus (new)

Response

As the proposal to create a new paragraph 1.b was not accepted the text cannot be transferred.

Text not changed.

Cmt. ***455 / ERA***

Comment

8.e One pilot amongst the flight crew must be designated as the pilot in command by the operator. The pilot in command is responsible for the safety of all passengers, crew members and cargo on board the aircraft.

Reason

The commander's responsibilities are already stated in chapter 1, paragraph 1.d

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***543 / IFALDA***

Comment

8.e One pilot amongst the flight crew must be designated as the pilot in command by the operator. The pilot in command is responsible for the safety of all passengers, crew members and cargo on board the aircraft.

8.e.1 Both the pilot-in-command and the flight dispatcher shall be jointly responsible for the preflight planning, delay, and flight dispatch release of a flight in compliance with these Essential Requirements and company policies/procedures as specified in the Operations Manual.
8.e.2 The Flight Dispatcher is responsible for:
a. Monitoring the progress of each flight;
b. Issuing necessary information for the safety of the flight;
c. Canceling or redispatching a flight if, in his opinion or the opinion or the opinion of the pilot-in-command the flight cannot operate safely as planned or released.

Reason

There are two types of errors which have caused operational accidents and incidents in Europe in recent years. Errors where a flight crew had poor or invalid information, such as bad weather ahead, or incorrect information about an aircraft systems failure: And the cases of where a flight crew had economic pressure on them to complete the operation, and they made a poor judgment resulting in an accident or incident. If these types of accidents and incidents are to be prevented in the future, then a significant change must be made in how operations are conducted in Europe.

See Attachment.

Attachment ER 8.e

There are two types of errors which have caused operational accidents and incidents in Europe in recent years. Errors where a flight crew had poor or invalid information, such bad weather ahead, or incorrect information about an aircraft systems failure: And the cases of where a flight crew had economic pressure on them to complete the operation, and they made a poor judgment, judgment resulting in an accident or incident. Both of these types of errors have resulted in accidents and incidents, sometimes with a combination of both bad information and poor judgment. Here is a list of them:

- Maersk Air B737, Billund, Denmark, December 1999, encountered severe weather, had outdated weather information, destination and alternates closed; fuel emergency.
- Hapag-Lloyd A310, Vienna, July 2000, experienced aircraft system failure (landing gear unable to retract), flight continued, misjudgment by crew, and poor support by the company, fuel exhaustion, aircraft destroyed.
- Swiss SAAB 2000 (Werneuchen) Berlin, July 2002, encountered severe weather, ATC vectored the aircraft into the front side of the severe weather, instead of the back side, destination and alternates closed, fuel exhaustion, aircraft destroyed.
- BMI A321, Over Germany, May, 2003, encountered severe weather/ hail, serious damage, aircraft continued for hundreds of kilometres to its destination before landing.
- EasyJet B737 Geneva, August, 2003, encountered severe weather/hail, serious damage.
- SAS A330, Helsinki, October, 2003, continued with no holding fuel into forecast low visibility/missed approach at destination of Stockholm, insufficient fuel for alternate; fuel emergency.

If these types of accidents and incidents are to be prevented in the future, then a significant change must be made in how operations are conducted in Europe. To ensure that the flight crew has the necessary information that they need at all times, someone has to be assigned to give it to them. That person must be a flight dispatcher. Only a flight dispatcher would have the necessary certification, training, knowledge and experience to provide this critical information.

To ensure that errors of judgment are kept to a minimum the pilot-in-command and flight dispatcher must have joint responsibility. They cross check each other and prevent these types of errors. It is a proven system. It is the human factors equivalent of the normal redundancy and safety that is built into today's aircraft. We don't send aircraft for air carriers or large operations out on a single engine. Yet we do send the flight crews out with no support from the air carrier/operator. They not only don't get the critical safety information they need, but they also are on their own when it comes to making critical decisions. And in many cases the flight crews are under severe stress due to economic factors to complete the operation, when it may not be safe to do so. These accidents/incidents are clear proof of this. A joint responsibility system would provide protection to the pilot-in-command from these types of pressures, as the flight dispatcher would be a buffer between management and the flight crew.

If the Agency and the Commission are serious about aviation operational safety, they must implement an effective operational control/flight dispatch system which guarantees that a flight will have the proper briefing/planning capability, in-flight monitoring and an effective decision making capability which ensures the safest outcome for the passengers on these aircraft. This system should have the following requirements:

1. A certified, trained flight dispatcher.
2. A reliable, effective ground-air communication system separate from ATC.
3. Tools, such as manuals and information systems.
4. Regulatory responsibility and authority for the flight dispatcher and pilot-in-command so that they can support each other.
5. Regulatory oversight.

Then these operational accidents and incidents that are occurring with alarming frequency would be far less likely.

Response

It is not the intention of these ER to mandate the use of flight dispatchers.

Text not changed.

Cmt. *642 / Vitezslav Hezky*

Comment

Change the second sentence as follows: "…, crew members, and cargo on board the aircraft and also for the safe operation of the aircraft.

Reason

The person stated in paragraph 8.e must be responsible also for the aircraft and its safe operation to protect any other entity which is not necessarily on board the aircraft. Responsibility for the safe operation is based on ICAO standard stated in Annex 6 provision 4.5.1.

Response

Comment accepted.

Second sentence deleted.

Cmt. *719 / SNPL / French ALPA*

Comment

8.e After the word "safety"
(add) and the security

Reason

ICAO regulation

Response

Responsibility for security is not within the scope of EASA.

Text not changed.

Cmt. *720 / SNPL / French ALPA*

Comment

Replace the term « pilot in command » by the term « commander »

Reason

To cover all the situation when the PIC is not on the cockpit (LROPS…)
This is a JAA term

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for Essential Requirements.

Text not changed.

Cmt. *724 / SNPL / French ALPA*

Comment

Responsibility as different juridique meaning in the European country. There is no single European meaning. This is the reason why "responsibility" in the essential requirements should be more precise. For example, is it civil or penal responsibility. Is the PIC responsible for the produce of his activity (nose, gas exhaust, object falling, fuel dumping, …)

Reason

Response

In legal terms responsibility is different from liability.

Text not changed.

Cmt. *817 / Airbus*

Comment

One pilot amongst the flight crew must be designated as the pilot in command commander by the operator. The pilot in command commander is responsible for the safety of all passengers, crew members and cargo on board the aircraft.

Reason

See our general comment on all paragraphs containing the expression "pilot in command"

Response

The term "pilot in command" is a standard ICAO Annex 6 vocabulary deemed appropriate for essential requirements.

Text not changed.

Cmt. ***1122 / ECOGAS***

Comment

Should come before 7b!

Reason

Response

This is an obligation on the operator therefore it is placed in section 8.

Text changed but not as proposed.

Cmt. ***1151 / ECA***

Comment

Please add the words 'and security' after the word safety in line 3.

Reason

ICAO regulation

Response

Responsibility for security is not within the scope of EASA.

Text not changed.

Cmt. ***1217 / LFV Sweden***

Comment

Delete the last sentence.

Reason

Already covered by para 1.d

Response

Comment accepted.

Text changed.

Cmt. ***1381 / Civil Aviation Administration FINLAND***

Comment

Delete the last sentence.

Reason

It is already covered by 1.d.

Response

Comment accepted.

Text changed.

8.f

Paragraph

Cmt. ***337 / British Airways Plc***

Comment

British Airways suggests that paragraph 8f is amended to state:
"The prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations nee to address flight time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, time zone crossing, positioning, cumulative duty time for given periods of time, positioning, sharing of allocated tasks between crew members, and also the provision of augmented crews.

Reason

1) and 2)The combination of "night hours" and "time zone crossing" covers the deleted words. Time zone crossing is a well known and more workable concept than "disruption of circadian cycles".

3) Since "positioning" is duty, it should be placed before "cumulative duty time"

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***428 / AEA***

Comment

The AEA request to rewrite paragraph 8f to read as:
"The prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations nee to address flight time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, time zone crossing, positioning, cumulative duty time for given periods of time, positioning, sharing of allocated tasks between crew members, and also the provision of augmented crews.

Reason

1) and 2)The combination of "night hours" and "time zone crossing" covers the deleted words. Time zone crossing is a well known and more workable concept than "disruption of circadian cycles".

3) "positioning" is duty, so it has to be placed before "cumulative duty time"

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***454 / ERA***

Comment

8.f The prevention of fatigue must be managed through a rostering system (or programme)limitations. For a flight, or series of flights, such limitations rostering regimes need to address flight time, flight duty periods, duty and adapted rest periods. The rostering Limitations established within the rostering regime/ programme must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, cumulative duty time for given periods of time, positioning, sharing of allocated tasks between crew members, and also the provision of augmented crews.

Reason

First the rostering system, regime or programme must be established, then within the programme limitations must be set based on the listed factors. The rostering system is more than a set of limitations – the phrase has a negative impact.

Response

Comment accepted.

Text changed.

Cmt. *544 / IFALDA*

Comment

8.f The prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations need to address flight time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, cumulative duty time for given periods of time, positioning, sharing of allocated tasks between crew members, and also the provision of augmented crews. Also, where applicable, duty times for ground personnel, including flight dispatchers should also be managed with appropriate duty time limits and required rest periods.

Reason

IFALDA believes that duty times are important not just for flight crew members, but for any person in a critical function, such as flight dispatch, just as many ATC controllers also have a maximum work time and rest period. Fatigue affects response times, situational awareness and decision-making. A minimum rest period should be applied for ground personnel. They must be able to support the flight whenever required, but must be rested in order to do so.

Response

The work and rest periods for ground personnel in Europe are defined through national laws or collective agreements.

Text not changed.

Cmt. *689 / MOT Germany*

Comment

Merge paragraph 7.e and paragraph 8.f, dealing with FTL issues to one single paragraph 9 “Prevention of fatigue” as follows:

9 Prevention of fatigue

9.a Operators and crew members must ensure that no crew member allows his/her performance to degrade to an extent where flight safety is jeopardized due to fatigue.

9.b Rest periods must provide sufficient time to enable crew members to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.

9.c For crews performing flight duty tasks as their profession, the operator and crewmembers shall ensure that the prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations need to address fligh time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, cumulative duty time for given periods of time, positioning of allocated tasks between crew members, and also the provision for time zone operations and for augmented crews.

Reason

As regards the proposed essential requirements for the prevention of fatigue, we feel – and the German FTL regulations mirror this circumstance – that the FTL requirements should address, on the highest regulatory level, all crews performing flight operations duties for a living. There should be made no difference if the pilot or cabin crew is earning money for flight duties in an aircraft involved in commercial air transport, aerial work or corporate operations. This also covers the rostering of crews, in which the operator is actively involved also. Hence, German FTL regulations stipulate prosecution of both, the operator and crew member in case of a violation of applicable requirements.

We feel the need to establish the same structure of FTL related requirements on a Community Level.

Response

Section 7. adresses all aviation in general terms. Specific regulation for commercial activities are covered in paragraph 8.f. Creating a section 9 would change the philosophy of the Essential Requirements. Nonetheless paragraph 8.f covers the concern of operator accountability.

Text not changed.

Cmt. *723 / SNPL / French ALPA*

Comment

8.f at the end of the paragraph
(add) It must be based on scientific studies and finding

Reason

Response

It is agreed that medical and scientific evidence along with operating experience should form an important basis for rostering systems. This should be addressed through implementing rules.

Text not changed.

Cmt. ***818 / Airbus***

Comment

"The prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations nee to address flight time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, time zone crossing, positioning, cumulative duty time for given periods of time, positioning, sharing of allocated tasks between crew members, and also the provision of augmented crews.

Reason

The combination of "night hours" and "time zone crossing" covers the deleted words. Time zone crossing is a well-known and more workable concept than "disruption of circadian cycles".

"Positioning" is duty, so it has to be placed before "cumulative duty time".

Response

Comment accepted.

Text changed but not as proposed.

Cmt. ***827 / LBA***

Comment

Merge paragraph 7.e and paragraph 8.f, dealing with FTL issues to one single paragraph 9 "Prevention of fatigue" as follows:

9 Prevention of fatigue

9.a Operators and crew members must ensure that no crew member allows his/her performance to degrade to an extent where flight safety is jeopardized due to fatigue.

9.b Rest periods must provide sufficient time to enable crew members to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.

9.c For crews performing flight duty tasks as their profession, the operator and crewmembers shall ensure that the prevention of fatigue must be managed through rostering limitations. For a flight, or series of flights, such limitations need to address fligh time, flight duty periods, duty and adapted rest periods. The rostering limitations must take into account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, disruption of circadian cycles, night hours, cumulative duty time for given periods of time, positioning of allocated tasks between crew members, and also the provision for time zone operations and for augmented crews.

Reason

As regards the proposed essential requirements for the prevention of fatigue, we feel – and the German FTL regulations mirror this circumstance – that the FTL requirements should address, on the highest regulatory level, all crews performing flight operations duties for a living. There should be made no difference if the pilot or cabin crew is earning money for flight duties in an aircraft involved in commercial air transport, aerial work or corporate operations. This also covers the rostering of crews, in which the operator is actively involved also. Hence, German FTL regulations stipulate prosecution of both, the operator and crew member in case of a violation of applicable requirements.

We feel the need to establish the same structure of FTL related requirements on a Community Level.

Response

Section 7. adresses all aviation in general terms. Specific regulation for commercial activities are covered in paragraph 8.f. Creating a section 9 would change the philosophy of the Essential Requirements. Nonetheless paragraph 8.f covers the concern of operator accountability.

Text not changed.

Cmt. ***1153 / ECA***

Comment

Please add the following sentence to the end of the paragraph: 'It must be based on scientific studies and findings'.

Reason

According to the Treaty establishing the European Community, all harmonisation in the area of safety should be based on the latest scientific findings.

Response

It is agreed that medical and scientific evidence along with operating experience should form an important basis for rostering systems. This should be addressed through implementing rules.

Text not changed.

8.g

Paragraph

Cmt. *48 / CAA Belgium*

Comment

The tasks specified in point 6.a. and those described in points 6.e and 6.f must be carried out by a continuing airworthiness management organisation that must meet the following conditions:
• […]
• it must establish an occurrence reporting, which must be used by the management system in order to contribute to the aim of continuous improvement of the safety of products parts and appliances; and
• […]
:
Proposed text : 8.g The tasks specified in point 6.a. and those described in points 6.e and 6.f must be carried out by a continuing airworthiness management organisation that must meet the following conditions:
• […]
• it must establish an occurrence reporting, which must be used by the management system in order to contribute to the aim of continuous improvement of the safety of products parts and appliances and the maintenance thereof; and
• […]

Reason

Maintenance practices must also be improved.

Response

This text is harmonised with existing Regulation (EC)1592/2002 text.

Text not changed.

Cmt. *453 / ERA*

Comment

Number paragraphs instead of using bullet-points eg: 8.g.1, 8.g.2, ...8.g.5:

Reason

Consistency - Why is 8.a divided into paragraph numbers 1 to 5, whereas 8.g has bullet-points; they are very similar requirements?

Response

Numbering such items could indicate an order of priority which is not intended.

Text not changed.

Cmt. *819 / Airbus*

Comment

Replace the entire paragraph by the following:

All tasks related to continuing airworthiness, as described in chapter 6, must be managed and carried out by organisations approved for these purposes and meeting the essential requirements of Annex 1 paragraph 3.a.

Reason

The important point is that, for commercial operation and operation of large aircraft, maintenance must be managed and carried out under organisation approvals. As regards continuing airworthiness, the essential requirements for organisation approvals are already laid down in the Basic Regulation, Annex 1, paragraph 3a. Reference thereto is sufficient.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1017 / CAA Denmark*

Comment

The first 3 lines of the § indicates that maintenance tasks and documentation shall be carried out by at “continuing airworthiness management organization”, suggest the text to be altered as follows:
“The tasks specified in point 6.a. and those described in points 6.e and 6.f must be controlled by the organization responsible for the continuing airworthiness and must meet the following conditions:”

Reason

The expression “continuing airworthiness management organization” refers (intended or unintended) to an organization approved in accordance with Regulation 2042 Part M Subpart G. this means that essential requirements for Air Operations will be linked to Implementation Rules for Continuing Airworthiness.

Response

Comment accepted.

Text changed but not as proposed.

Cmt. *1218 / LFV Sweden*

Comment

Delete all text after "… continuing airworthiness management organisation".

Reason

The parts to be deleted are already covered by subpart G of regulation 2042/2003 Part M, except the fourth bullet which is covered by para the requirement in 8.a.5 of the drafted Annex 2.

Response

This paragraph of the Essential Requirements is needed as it is intended to make subpart G of Regulation (EC) 2042/2003 Part M compulsory for operators.

Text changed but not as proposed.

Cmt. *1382 / Civil Aviation Administration FINLAND*

Comment

Delete the this paragraph in total.

Reason

It is already covered by Part G to EC Regulation No 2042/2003 except the forth bullet point which is covered by paragraph 8.a.5.

Response

This paragraph of the Essential Requirements is needed as it is intended to make subpart G of Regulation (EC) 2042/2003 Part M compulsory for operators.

Text changed but not as proposed.

Cmt. *1531 / MOT/PW&WM NL*

Comment

The conditions applicable to a maintenance management organisation are all mentioned in the existing Commission Regulation 2042/2003 . An air operator should always have a direct management link to the maintenance of the aircraft. All details should be removed from 8g.

Reason

1st bullet: An AOC holder commits to certain safety responsibilities for its operations which cannot be circumvented by subcontracting the whole operation. Subcontracting the responsibility for the management of continued airworthiness is not allowed. When subcontracting, the AOC organisation should still remain a real airline company) with an operation in conformity with the AOC requirements (instead of a "paper airline", consisting of a single office and a lot of contracts)
The content of the bullets under G are all well covered in Commission regulation 2042/2003 on continuing airworthiness and do not require regulation at the level of ER's.

Response

This paragraph of the Essential Requirements is needed as it is intended to make subpart G of regulation 2042/2003 Part M compulsory for operators.

Text changed but not as proposed.

Cmt. *1593 / DGAC*

Comment

Quel est l'articulation de ces nouvelles dispositions avec les règles déjà adoptées dans le Règlement (CE) N°2042/2003 de la Commission du 20 novembre 2003 relatif au maintien de la navigabilité des aéronefs et des produits, pièces et équipements aéronautiques, et relatif à l'agrément des organismes et des personnels participant à ces tâches ?
Quelles en seront les conséquences sur ce règlement ?

Reason

Le Règlement (CE) N°2042/2003, adopté il y a moins d'un an pour mettre en œuvre les exigences essentielles de navigabilité du Règlement de base 1592/2002, contient déjà des règles relatives au maintien de la navigabilité. La note ne présente pas les raisons ayant amené à reprendre dans ces exigences essentielles des principes déjà mis en oeuvre dans le règlement 2042/2003.
La note explicative ne permet pas non plus d'évaluer les éventuelles conséquences sur le règlement 2042/2003 déjà adopté et que l'industrie et les autorités ont commencé à mettre en oeuvre.
Des explications complémentaires permettraient d'éviter des confusions et malentendus préjudiciables à une mise en œuvre sereine du règlement 2042/2003 (voir quelques exemples en annexe).

Response

Article 5 of Regulation (EC) 1592/2002 adresseses the issue of the airworthiness and continuing airworthiness of aircraft as seen mainly from a manufacturer and maintenance organisation point of view. It does not address this from the point of view o the owner/operator obligations. Furthermore, Article 5 only addresses aircraft not excluded from the Regulation via Article 4.2.

In principle the statement is correct, Commission Regulation (EC) 2042/2003 will cater for the implementing measures linked to this paragraph. But it is not possible to refer to a Commission Regulation in a Parliament and Council Regulation.

Text not changed.

Paragraph *bullet 4*

Cmt. *452 / ERA*

Comment

• it must establish an occurrence reporting system for use by all employees, which must be used by the management system in order to contribute to the aim of continuous improvement of the safety of products parts and appliances; and employees, an

Reason

Comments on occurrence reporting are the same as given for the "operator" in 8.a.5
• It is worth emphasizing who can use the occurrence reporting system in terms of who makes the reports – this is different from those who use the results of report analyses.
• It is recommended that occurrence reporting systems – although a fundamental part of any safety management programme – should be managed separately from any commercial or operational company management; the independence guaranteeing confidentiality and high rates of return.
• The management system should be obliged to act on the advice, or information, provided by the system, but it is counter-productive to indicate that the management system must use "occurrence reporting".
• The human safety performance element should also be considered in any reporting scheme

Response

This text is harmonised with existing 1592/2002 text.

Text not changed.

Expnote General Comments

Paragraph

Cmt. *879 / John Thorpe, Chief Executive*

Comment

There appears to be duplication in that
• Obstacle clearance accountability conditions in the context of all flight phases
is nearly the same as
• Inadequacy between aircraft performance and obstacle situation

There are a number of hazards missing from the list namely:
• Failure to maintain sufficient flying speed
• Lack of appreciation of the dangers of low flying
• Ignorance of structural limitations

Reason

The missing items are major killers in general aviation.

Response

Comment noted.

Cmt. *1487 / Mr. J. Thorpe*

Comment

Explanatory Note p. 3/9 Mitigation of Hazards Linked with the Operation of the Aircraft and Annex 2 Essential Requirements Operations.
'26. The hazard posed by birds must be considered and if necessary the flight delayed so that they can be removed from the runway area'.

Reason

Bird strikes are a significant world wide hazard that can damage both, or all, engines in an aviation world increasingly dominated by twin engined aircraft. This is more hazardous than unruly passengers and should be included. In total 80 civil aircraft have been destroyed by birds with the loss of 231 lives.

Response

Comment noted.

Paragraph *30*

Cmt. *585 / EASA/Technical Committee*

Comment

Medical equipment is primarily used in situations other than described in the explanatory note.

Reason

Response

Comment accepted.

Paragraph *Item 34*

Cmt. *1018 / CAA Denmark*

Comment

The referred statement concerning lack of proper pre-flight inspections as being a common cause of accidents, can not be verified by the Danish CAA.

Reason

Response

Comment noted.

6

Paragraph

Cmt. *36 / CAA Belgium*

Comment

All the section 6 must be duplicated for the remote control station of an UAV, where the word aircaft must be replaced by “UAV remote control station”

Reason

Obviously, the UAV remote control station is part of the system and needs to be reliable and well maintained.

Response

In the case of a aircraft the flight controls are not specifically mentioned. The same should apply for UAVs. The remote control station should be considered as being part of the aircraft.

Text not changed.

Cmt. *210 / CAA, UK*

Comment

“The continuing airworthiness of all aircraft used for air operations should meet the requirements for airworthiness referred to in Article 5 of the basic regulation and continuing airworthiness requirements referred to in Article 3 of Commission Regulation (EC) 2042/2003”.

Reason

This section does not have a link to the continuing airworthiness requirements established in essential requirement 1592/2002 or Implementing Rule 2042/2003. It is recommended that section 6 has a paragraph at the beginning containing the above text.

Response

Article 5 of Regulation (EC) 1592/2002 adresses the issue of the airworthiness and continuing airworthiness of aircraft as seen mainly from a manufacturer and maintenance organisation point of view. It does not address this from the point of view of the owner/operator obligations. Furthermore, Article 5 only addresses aircraft not excluded from the Regulation via Article 4.2.

In principle the statement is correct, Commission Regulation (EC) 2042/2003 will cater for the implementing measures linked to this paragraph. But it is not possible to refer to a Commission Regulation in a Parliament and Council Regulation.

Text not changed.

Cmt. *214 / CAA, UK*

Comment

These sections contain both essential requirements and implementing rules, this gives too much detail in the essential requirements and restricts the ability of the implementing rules to be flexible.

Reason

For example: Paragraph 6c, 6e, 6g and first sentence of 6f are considered implementing rule material.

Response

To ensure legal certainty, the Essential Requirement must contain some basic details.

Nonetheless, it is agreed that section 6.e is quite developed and has been somewhat reduced.

Text changed.

Cmt. *217 / CAA, UK*

Comment

Several references are made to the procedures to be adopted for the oversight of the Continuing Airworthiness, which are in general complementary to the provisions of Part M. It seems unusual to refer to such procedures in these Essential Requirements when they are only part of the Implementing Rules of another regulation. The UK CAA recommends that the Essential Requirements for Operations merely make reference to the provisions of Part M in respect of Continuing Airworthiness and goes into no further detail than to require that the aircraft be maintained in an airworthy condition (paragraph 6a), and that the operation must be conducted in accordance with the provisions of Part M (paragraph 8a).

Reason

Avoidance of potential for conflicting interpretations, if ER Ops and Part M are not exactly harmonised.

Response

In principle the statement is correct, Commission Regulation (EC) 2042/2003 will cater for the implementing measures linked t this paragraph. But it is not possible to refer to a Commission Regulation in a Parliament and Council Regulation.

Text not changed.

Cmt. *327 / British Airways Plc*

Comment

Change the title of 6 to read “Continued Airworthiness” (in stead of continuing airworthiness)

Reason

Wording used in Part-M and other documentation

Response

Expression "Continuing Airworthiness" is used throughout Regulation (EC) 2042/2003.

Text not changed.

Cmt. *418 / AEA*

Comment

Change the title of 6 to read “Continued Airworthiness” (in stead of continuing airworthiness)

Reason

Wording used in Part-M and other documentation

Response

Expression "Continuing Airworthiness" is used throughout Regulation (EC) 2042/2003.

Text not changed.

Cmt. *824 / LBA*

Comment

Insert a new paragraph 6.h, referring to EU Regulation 2042/2003.

Reason

In Chapter 6 clear links between these operational requirements and the requirements for airworthiness need to be established. Please note this general comment on the applicability of Chapter 6. We feel that links between operational and technical aspects are missing.

Response

Commission Regulation (EC) 2042/2003 will cater for the implementing measures linked to this paragraph. But it is not possible to refer to a Commission Regulation in a Parliament and Council Regulation.

Text not changed.

Paragraph

Cmt. *686 / MOT Germany*

Comment

Draft Essential Requirements Paragraph 6
Insert a new paragraph 6.h, referring to EU Regulation 2042/2003.

Reason

In Chapter 6 clear links between these operational requirements and the requirements for airworthiness need to be established. Please note this general comment on the applicability of Chapter 6. We feel that links between operational and technical aspects are missing.

Response

Commission Regulation (EC) 2042/2003 will cater for the implementing measures linked to this paragraph. But it is not possible to refer to a Commission Regulation in a Parliament and Council Regulation.

Text not changed.

7.f

Paragraph

Cmt. *40 / CAA Belgium*

Comment

A crew member must not perform allocated duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to fatigue, medication, sickness or other similar causes.

Comment:
This text obliges people to stop duties when unfit. Somebody has to stay at the controls when the aircraft is airborne!

Proposed text:
7.f. Before the departure, nobody shall accept to be allocated to duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to fatigue, medication, sickness or other similar causes or when excessive fatigue is likely to appear during the flight. A crew member shall not consume psychoactive substances or alcohol when on board of an aircraft where he/she is to be/has been allocated duties.

Reason

Somebody who has refused duty before departure is not part of the crew even if on board.
It is not sufficient to be fit during the first minute of the flight.
The last sentence takes into account reinforced crew, where a crew member is not immediately performing tasks on board.

Response

The proposed text would be too detailed and go beyond what is deemed appropriate for Essential Requirements.

Text changed but not as proposed.

Cmt. *41 / CAA Belgium*

Comment

7.f. A crew member must not perform allocated duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to fatigue, medication, sickness or other similar causes.

Proposed text:

Add the following text for UAVs:
7.f. bis Nobody shall accept to be allocated to duties at an UAV remote control station when under the influence of psychoactive substances or alcohol or when unfit due to fatigue, medication, sickness or other similar causes or when excessive fatigue is likely to appear during the flight. A flight crew member shall not consume psychoactive substances or alcohol when a the control of an UAV. If the duration of the flight is such that relief of the flight crew is necessary, the UAV operator shall ensure that relief flight crew and reserve flight crew are available as needed.

Reason

self explanatory

Response

A person controlling an UAV is encompassed in the ICAO definition of flight crew member.

Text not changed.

Cmt. ***42 / CAA Belgium***

Comment

A crew member must not perform allocated duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to fatigue, medication, sickness or other similar causes.

Comment:

There should be provisions such that some other people (like people from the operator, people from the airport and so on) should take measures to restrain people under influence to perform duties on board.

Reason

Response

This should not be part of Essential Requirements for operations but should be addressed by more general laws and regulations

Text not changed.

Cmt. ***1596 / DGAC***

Comment

Modifier le paragraphe comme suit :
« Un membre d'équipage ne doit pas effectuer les missions qui lui sont confiées à bord d'un appareil lorsqu'il est sous l'influenc de substances psychoactives ou d'alcool ou lorsqu'il est inapte physiquement ou mentalement en raison de la fatigue, de médication, de maladie ou d'autres causes semblables.»

Reason

Un membre d'équipage doit être apte physiquement et mentalement.

Response

Mental ability is not part of ICAO Annex 6.

Text changed in accordance with ICAO Annex 6.