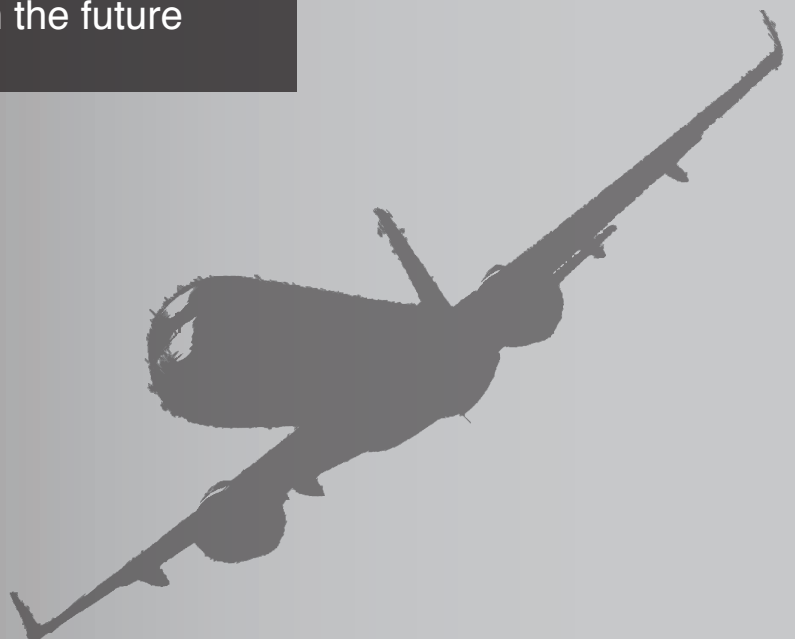


# 2013 SAFETY SURVEY

## *Aviation professionals optimistic about airline safety*

The majority of aviation professionals believe that airline safety has improved over the last five years and will continue to improve in the future



## 52% of survey respondents expect airline safety to improve over the next five years – only 13% think it will get worse.

An extensive survey of people in the aerospace and air transport industries reveals that 60% believe aviation safety has been improving and 52% expect it to continue to improve in the future. However, when asked to pick from a list of possible threats to safety, respondents most frequently expressed reservations about the shrinking pool of expert employees, management style and priorities, and complacency.



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Ascend recently surveyed more than 2,000 aviation industry personnel at all levels; the highest proportion of respondents were from the airline and aerospace manufacturing sectors, but also included sectors that serve the industry like maintenance, repair and overhaul (MRO) and insurance/finance. More than 20% of respondents comprised very senior management including chief executives, with 23% consisting of team leaders or heads of department, and 38% of other qualified professionals. Of the participants, 46% were based in Europe, 23% in North America and 16% in the Asia-Pacific.

The questions were intended to reveal the perception of airline safety levels by those within the industry or those who serve it.

Asked whether they thought airline safety over the last five years had improved, stayed about the same or worsened, 60% said that it had improved and 31% said it had remained about the same. Only 7% believed that it had worsened. Expectations for the next five years were broadly similar, with 52% expecting that safety will improve, 33% that it will stay the same, and 13% that it will get worse.

Provided with a list of 10 potential threats to safety, the participants were asked what level of threat each one represented. Among those judged a “significant threat”, 33% cited a shortage of experienced personnel, 38% the risk of fatigue/work practice among safety-critical employees like engineers, pilots and air traffic controllers (ATCs), 28% cited complacency, 27% airline management experience/attitude/culture, and 20% lack of effective safety oversight.

From a list of 10 potential drivers for safety improvement, the top mark (33%) was shared by management accountability for safety and the increased adoption of available “safety equipment”. These were followed by new technology for aircraft and air traffic management, increased sharing of safety data and the spread of industry best practice.

Among the freestyle comments participants chose to add, the most commonly cited subjects included the need for a review of pilot training and, as recently highlighted in the media, “the safety effects of low-cost carriers' employment policies”.

## Perception of safety trends

The survey began with two questions about how “airline safety” had changed globally over the last five years and how it might be expected to change over the next five years – “improve”, “get worse”, “stay about the same” and “do not know”.

The questions were kept deliberately vague and did not define what was meant by “airline safety” in order to try to elicit people’s basic feelings. Interestingly, virtually everyone who responded had a view on the matter with only 1-2% ticking the “do not know” boxes.

The perception of airline safety is, in some ways, as important as the industry’s actual level of safety. The fatal accident rate for western European and North American airlines is currently better than one in 10 million flights, but a large number of people are still scared of flying or at least experience some apprehension about boarding an aircraft. The more unsafe they perceive the industry or individual airlines to be, the more inclined they are not to fly.

As a passenger, the chance of being killed in an air crash is about the same as winning the jackpot on the lottery but of course people still buy lottery tickets with some level of expectation that their number might come up.

It was recognised very early on that a negative perception of airline safety, mainly based on the frequency of reports of “air crashes” in the media, can have a detrimental impact on the industry.

As long ago as 1943, a report by Curtiss-Wright to the US government concluded:

*“If the accident rate remains the same as in the 1930s, the expected growth in commercial aviation after the [Second World] War will result in an unacceptable number of accidents. This will, ultimately, limit this growth.”*

This is still true today, with the industry continuing to grow, that maintaining the same level of safety is not good enough. Safety should improve at least as fast as growth or, by the nature of things, the number of accidents will increase and airlines will be perceived as becoming less safe.

As the Red Queen in Lewis Carroll's *Through the Looking Glass* might have explained to Alice, in airline safety *“...it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run a whole lot faster!”*

## How has airline safety actually changed?

In the late 1930s, the US airline passenger fatality rate was about one per 50,000 passengers carried (the world passenger fatality rate at that time was probably closer to one per 10,000 passengers carried).

US and world airline safety did begin to improve after the Second World War and, by 1950, when US airlines, including major airlines like American, Eastern, Northwest, TWA etc, suffered 15 fatal accidents in which 31 crew and 182 passengers died, the passenger fatality rate was twice as good as in the late 1930s – one passenger fatality per 100,000 carried.

Globally in 1950, there were at least 39 fatal accidents on revenue passenger flights resulting in some 799 passenger fatalities. In 2012 there were just 10 fatal accidents on revenue passenger flights worldwide, resulting in 364 passenger fatalities. None of the accidents in 2012 involved a US airline, “major” or otherwise. In fact, the airlines involved in the 2012 accidents are probably not known outside the markets they serve.

Airline safety has continued to improve since 1950 and has not only managed to keep up with the huge expansion of air travel but has also gotten ahead of it, actually reducing the frequency of fatal accidents.

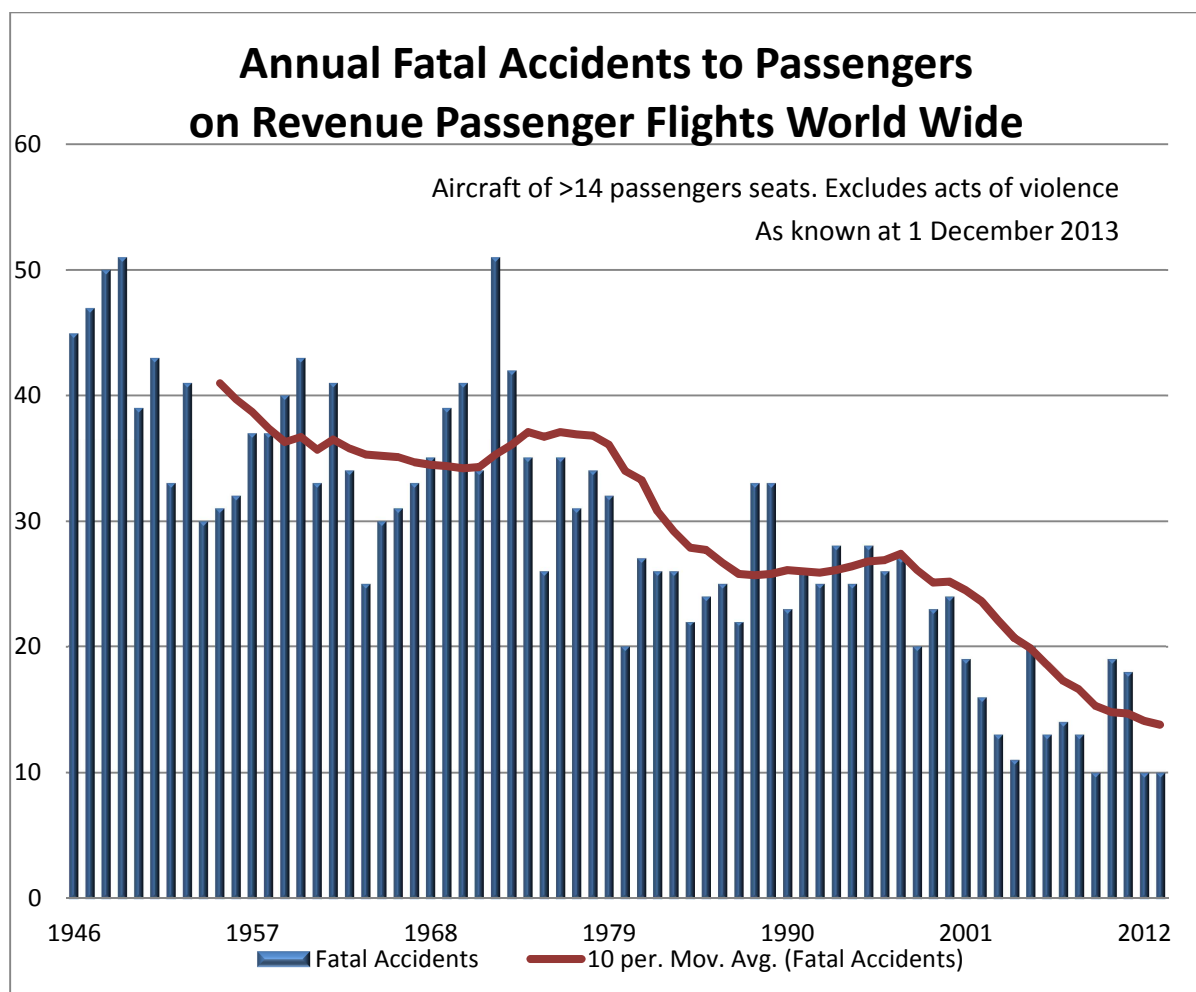
In the immediate post-War years, typically, there may have been 40 to 50 fatal accidents involving revenue passengers each year but this has now more than halved to between 10 and 20 a year – the annual average for the 10 years to the end of 2012 was 14.1. At the time of writing, the number of fatal accidents involving revenue passengers so far in 2013 was 10.

Curtiss-Wright's fear that the public would be driven away from flying by the increasing numbers of accidents has thankfully not been realised, although of course, there are still people who are scared of flying.

In 2012, the estimated global passenger fatality rate had fallen to one per 9.9 million passengers carried. By this measure, this made 2012 the safest year ever and some 20% better than 2011 when the passenger fatality rate was one per 8.2 million passengers

carried; 2011 had itself been previously called “the safest year ever”. Unless there are further fatal accidents during the last few weeks of the year, 2013 may replace 2012 “as the safest year ever”.

Airline safety, if measured by the passenger fatal accident rate, is probably about 100 times better now than in 1950 and more than twice as good as 10 years ago. Although individual years may be better or worse, airline safety has been improving for very many years and, certainly, for the last 15 years, has been improving more rapidly than the industry has been growing.



## How the industry sees its safety globally

1.	<b>Over the last five years do you think that, globally, airline safety has:</b>	
	1276 (60%)	<i>Improved</i>
	153 (7%)	<i>Got worse</i>
	663 (31%)	<i>Stayed about the same</i>
	19 (1%)	<i>Do not know</i>

Asked about airline safety over the last five years, 91% of respondents believed that it had got better or, at least, stayed about the same. Almost two-thirds, 60%, believed it had got better and only 7% that it had worsened. About 1% did not give an opinion.

2.	<b>Over the next five years do you think that, globally, airline safety will:</b>	
	1090 (52%)	<i>Improve</i>
	280 (13%)	<i>Get worse</i>
	693 (33%)	<i>Stay about the same</i>
	49 (2%)	<i>Do not know</i>

Looking forward to the next five years, respondents were slightly less optimistic with 85%, down from 91%, believing that airline safety would get better or stay the same. Just over half (52%) believe that it will get better and 13% that it will get worse. Again only 2% did not know.

This is sixth year we have conducted our airline safety perception survey. Over this period we have obtained broadly similar results, although those for 2013 are notably more positive than last year's. (Care should be taken when considering these results since the 2013 survey is based on a far larger sample than in previous years).

The increase in the percentage of respondents saying that airline safety has improved over the last five years (+15 percentage points on 2012) reflects almost equal reductions in the percentage of respondents saying that safety has worsened (-8 percentage points) or stayed the same (-9 percentage points).

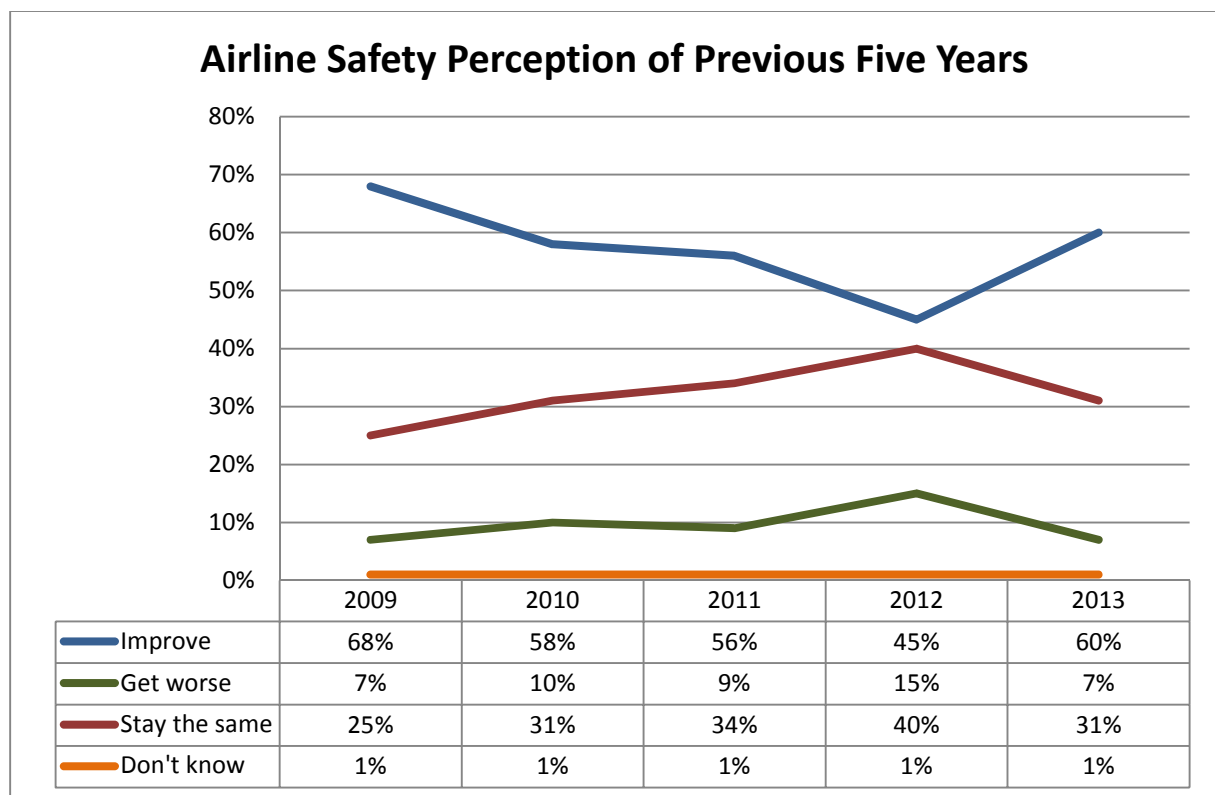
The year 2012 was the most "negative" since the start of the survey, with only 45% thinking that safety had improved during the previous five years and 55% thinking that it had worsened or stayed the same. About 15% of respondents thought safety had worsened, making 2012 the only year in the series where more than 10% were of this opinion.

The year 2009 was the most "positive" year in the series (this question was not asked in 2008), with 68% of respondents believing that safety had improved over the previous five years. In the same year, only 32% of respondents thought safety had worsened or stayed the same, versus 38% in 2013. In 2009, only 7% thought safety had worsened, the same percentage as this year.



<b>Over the last five years do you think that, globally, airline safety has:</b>						
Year	2013	2012	2011	2010	2009	2008
<i>Improved</i>	60%	45%	56%	58%	68%	
<i>Got worse</i>	7%	15%	9%	10%	7%	
<i>Stayed the same</i>	31%	40%	34%	31%	25%	
<i>Do not know</i>	1%	1%	1%	1%	1%	

Survey results prior to 2013 were based on a far smaller sample.



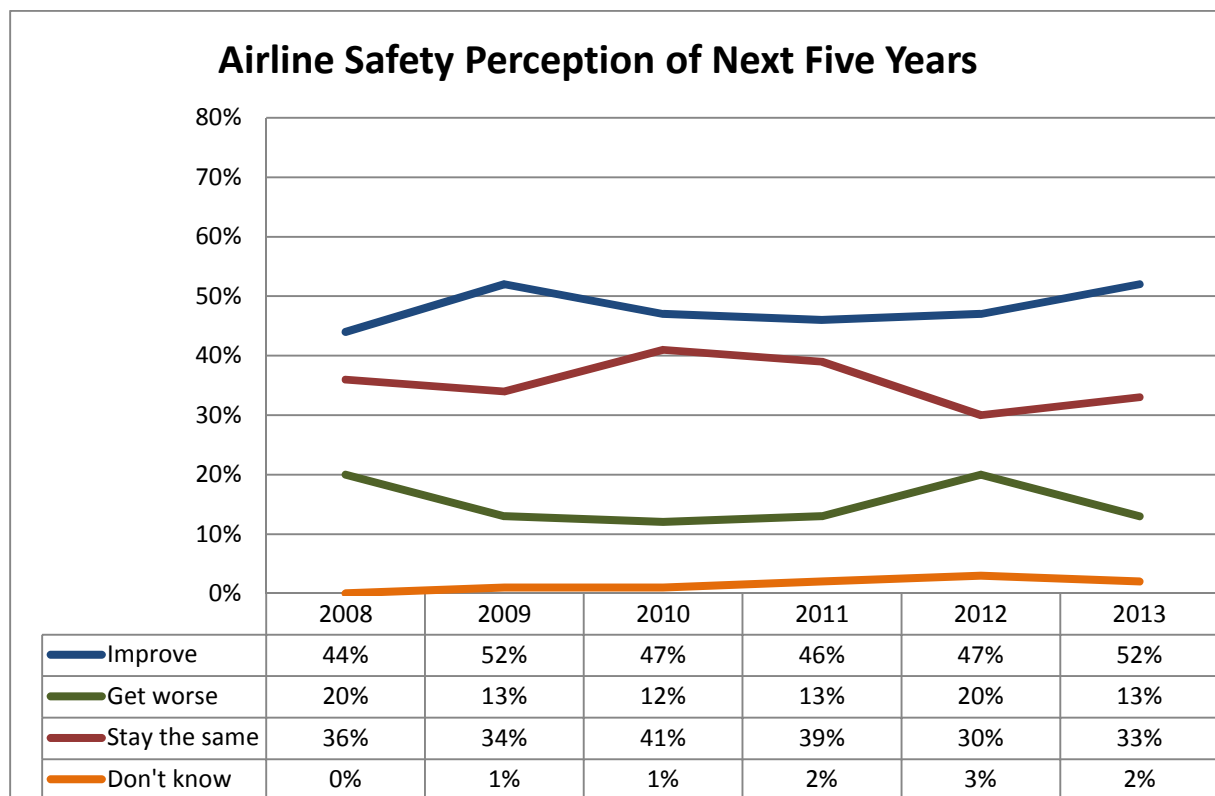
It is interesting to note that, up until this year, respondents' views of airline safety during the previous four years had gradually been worsening with an increasing percentage believing that there had been no improvement in safety.

<b>Over the next five years do you think, globally, airline safety will:</b>						
Year	2013	2012	2011	2010	2009	2008
<i>Improve</i>	52%	47%	46%	47%	52%	44%
<i>Get worse</i>	13%	20%	13%	12%	13%	20%
<i>Stay the same</i>	33%	30%	39%	41%	34%	36%
<i>Do not know</i>	2%	3%	2%	1%	1%	0%

Survey results prior to 2013 were based on a far smaller sample.

Looking to the future, respondents were of the opinion that airline safety will continue improving over the next five years. However, they were not quite as “positive” about this as they were about the previous five years.

The 2013 survey – with 52% of respondents expecting continued improvement – showed the most positive result out of the six previous years, apart from 2009 which also saw 52% expecting improvement. The year 2008 was the most “negative” with only 44% of respondents expecting improvements and 20% thinking safety would get worse. However, unlike the perception of the past five years, respondents’ view of the future has been more consistent, with those expecting safety to continue to improve staying within a range of eight percentage points – a low of 44% and a high of 52%.

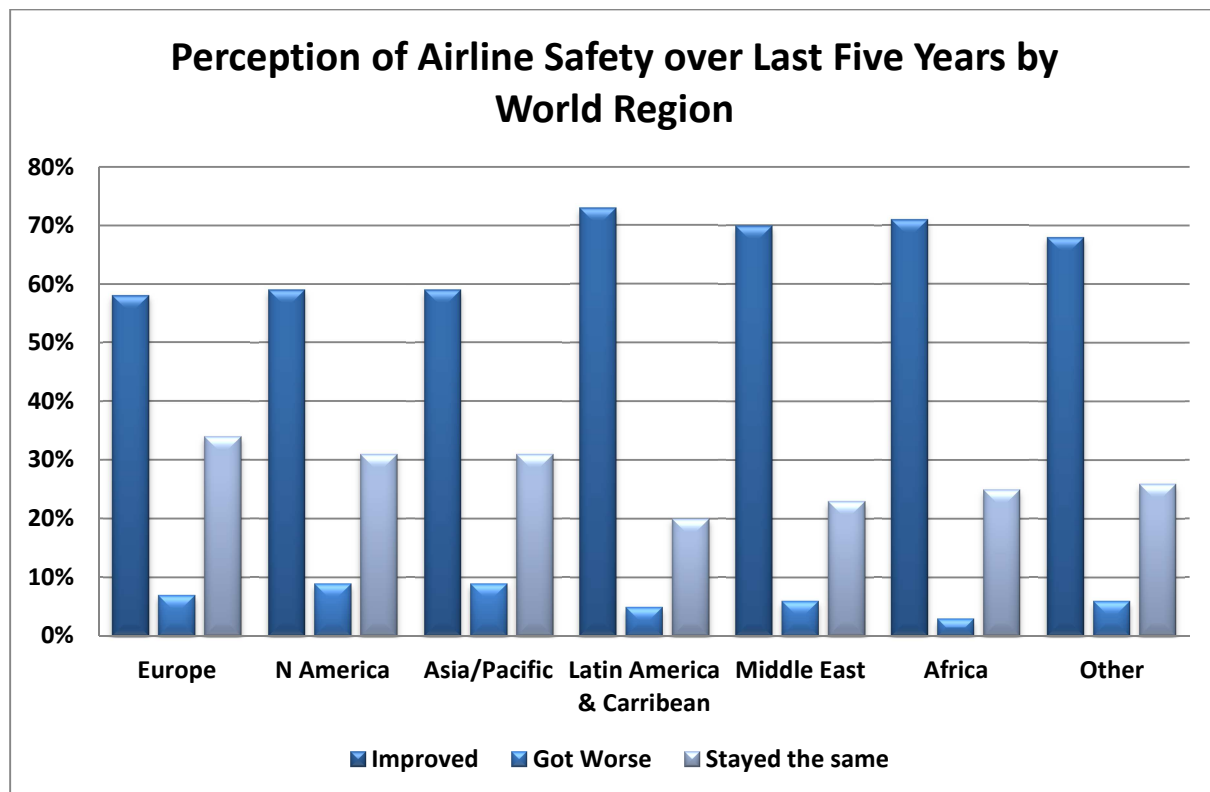




## How the industry sees its safety – by region

Over the last five years do you think that, globally, airline safety has:						
Region	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa
<i>Improved</i>	58%	59%	59%	73%	70%	71%
<i>Got worse</i>	7%	9%	9%	5%	6%	3%
<i>Stayed the same</i>	34%	31%	31%	20%	23%	25%
<i>Do not know</i>	1%	1%	2%	2%	1%	1%

Results for the last three areas are based on small sample sizes and results may reflect self-selection of respondents with a more positive view of airline safety



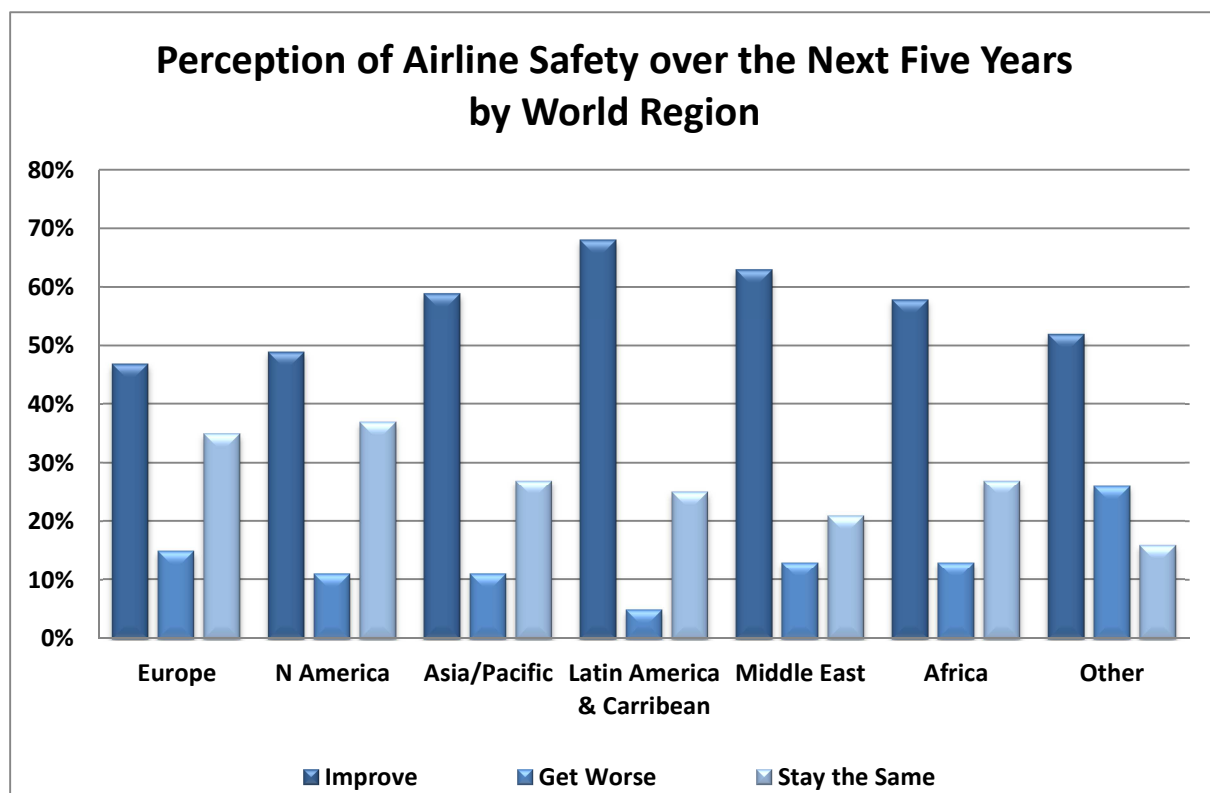
When respondents were broken down by region, results were very similar for those based in Europe, North America and the Asia-Pacific, with the differences between these regions amounting to only 1-2 percentage points. In short, 58-59% of respondents from these regions believe that airline safety has improved over the last five years while only 7-9% think it has worsened. About 31-34% think it has stayed the same.

Respondents from the three other regions – Latin America & the Caribbean, Middle East and Africa – also showed similar results among themselves, but all were considerably more

positive about safety improvements over the last five years than those from the other regions. About 70-73% of respondents from these regions think that safety has improved, more than 10 percentage points above those in Europe, etc. However, the results from these regions are based on a smaller sample size and may reflect self-selection of respondents with a more positive view of airline safety.

<b>Over the next five years do you think that, globally, airline safety will:</b>						
Region	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa
<i>Improve</i>	47%	49%	59%	68%	63%	58%
<i>Get worse</i>	15%	11%	11%	5%	13%	13%
<i>Stay the same</i>	35%	37%	27%	25%	21%	27%
<i>Do not know</i>	2%	2%	3%	2%	3%	2%

Results for the last three areas are based on small sample sizes and results may reflect self-selection of respondents with a more positive view of airline safety



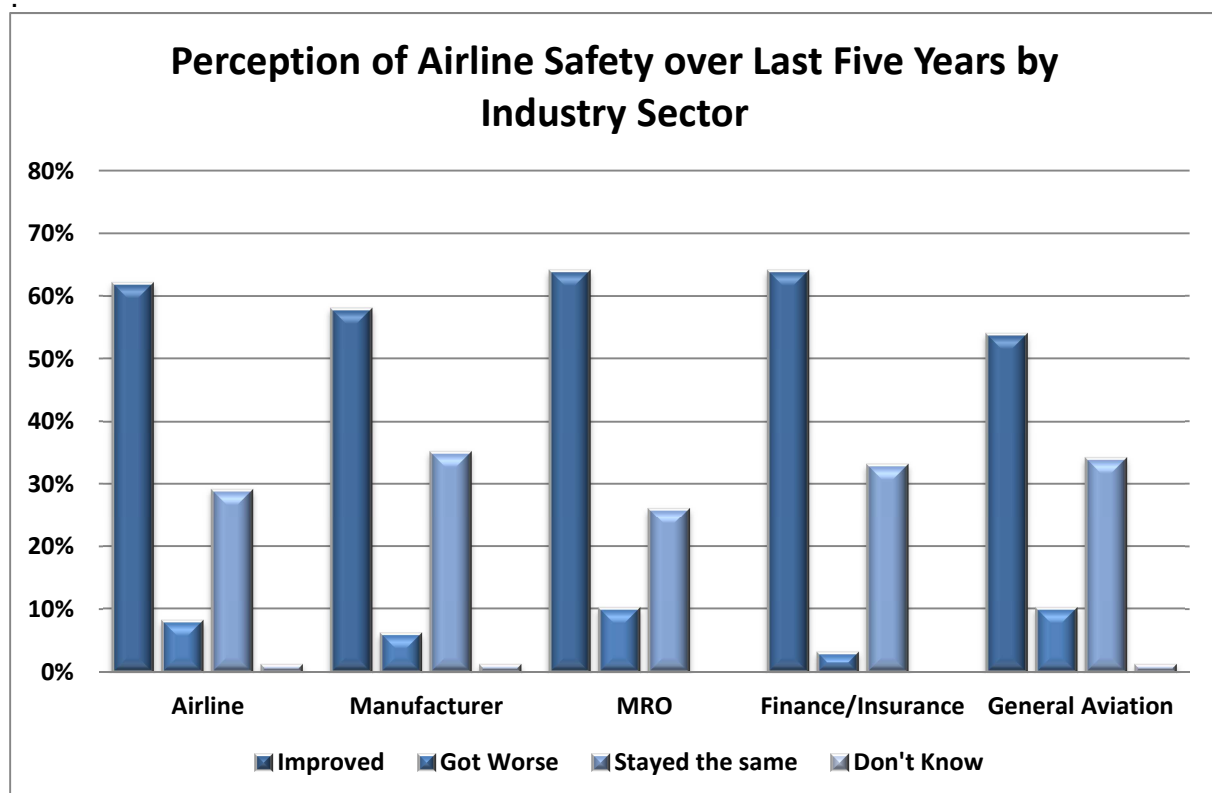
With the exception of the Asia-Pacific region, respondents were again less positive about the next five years compared with how they saw the last.

Europe and North America were the least positive, with only 47% and 49% of respondents, respectively, expecting safety to improve in the next five years, compared with 58% and 59% who thought it had improved during the last five years. Latin America & the Caribbean remained the most positive about the future, with 68% of respondents expecting continued

improvement and only 5% expecting things to get worse. Africa remained one of the more positive regions, with 58% believing airline safety will continue to improve, but showed the largest swing – down 13 percentage points – when compared with respondents' perception of improved safety over the last five years.

## How the industry sees its safety – by industry sector

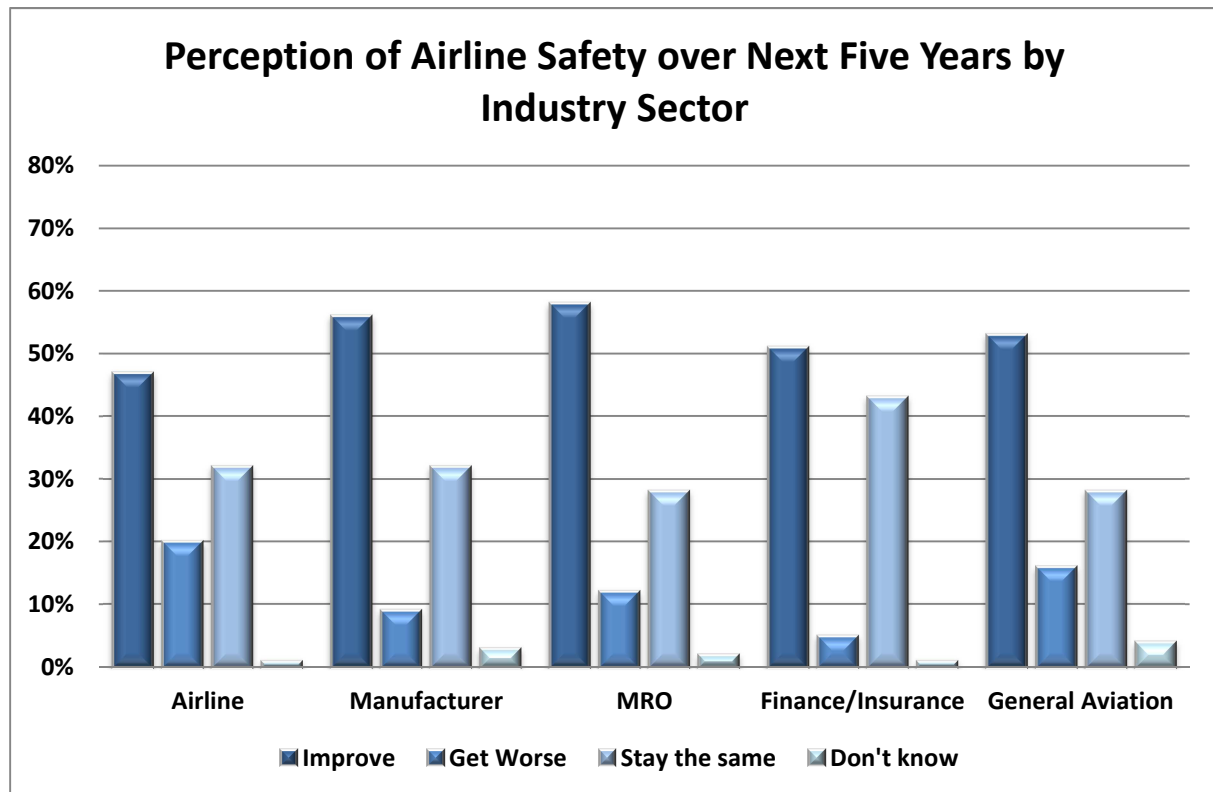
Over the last five years do you think that, globally, airline safety has:					
Region	Airline	Manufacturer	MRO	Insurance/ Finance	General Aviation
Respondents	541	306	118	112	79
<i>Improved</i>	62%	58%	64%	64%	54%
<i>Got worse</i>	8%	6%	10%	3%	10%
<i>Stayed the same</i>	29%	35%	26%	33%	34%
<i>Do not know</i>	1%	1%	0%	0%	1%



The different industry sectors had broadly similar views as to how airline safety has changed over the last five years. About 62% of respondents from airlines thought that their industry's safety had improved, four percentage points more than those from the manufacturers. However, those from the MRO and finance/insurance sectors were the most positive, with

64% from both groups seeing an improvement. The least positive group was “general aviation” with only 54% of respondents believing airline safety had improved.

Over the next five years do you think that, globally, airline safety will:					
Region	Airline	Manufacturer	MRO	Insurance/ Finance	General Aviation
Respondents	542	306	118	112	80
<i>Improve</i>	47%	56%	58%	51%	53%
<i>Get worse</i>	20%	9%	12%	5%	16%
<i>Stay the same</i>	32%	32%	28%	43%	28%
<i>Do not know</i>	1%	3%	2%	1%	4%



Airline respondents were the least optimistic about airline safety over the next five years, with more believing that it will get worse or stay the same, compared with those who believe it will continue to improve. Only 47% thought safety would improve while 20% thought it would get worse and 32% thought it would stay the same.

After airlines, finance/insurance came in next, with only a slight majority (51%) believing safety would continue to improve. However, only 5% of this group thought safety would worsen. About 43% thought there would be no change.

## Perceived threats to safety

Fatigue/work practice involving front-line professionals (pilots, engineers and air traffic controllers) was seen to be a “significant threat” to airline safety by 38% of respondents and this increased to 80% for those seeing it either as a “significant” or “bigger” threat. Coming second to this in importance was a “shortage of experienced personnel”, with 33% of respondents rating this as a “significant” threat. A further 40% saw it as a “bigger” threat.

Areas seen as less of a safety threat included “rapid growth in airline size”, “airport/airway congestion”, and the “criminalisation of accidents/incidents”. Criminalisation was seen as the least significant threat overall, with 61% of respondents seeing it as a “little” or “no” threat to safety, against 39% of respondents deeming it to be either a “significant” or a “bigger” threat.

3.	Please rate how much of a threat you think each of the following are to airline safety:			
	<i>No threat</i>	<i>A little threat</i>	<i>A bigger threat</i>	<i>A significant threat</i>
Shortage of experienced personnel	70 (3%)	497 (24%)	842 (40%)	698 (33%)
Lack of effective regulatory oversight	135 (6%)	695 (33%)	850 (40%)	427 (20%)
Airline management experience / attitudes / culture	103 (5%)	596 (28%)	845 (40%)	560 (27%)
Airline financial health	119 (6%)	738 (35%)	876 (42%)	373 (18%)
Rapid growth in airline size	283 (13%)	919 (44%)	691 (33%)	207 (10%)
Airport / airway congestion	178 (8%)	1038 (49%)	663 (32%)	224 (11%)
Criminalisation of accidents / incidents	417 (20%)	861 (41%)	514 (25%)	303 (14%)
Fatigue / work practice (pilots, engineers, ATC etc.)	39 (2%)	384 (18%)	888 (42%)	791 (38%)
Ageing aircraft	242 (11%)	1011 (48%)	591 (28%)	263 (12%)
Complacency	83 (4%)	585 (28%)	844 (40%)	582 (28%)

## Perceived threats to safety – by region

Among the different regions, respondents’ views of possible threats to airline safety were broadly similar in many ways. However, there were differences in some areas, for example, African respondents scored “lack of effective regulatory oversight” higher than those from

North America. Also, those from the Middle East appeared to be more concerned about “airline management” than respondents in North America and Europe.

<b>Shortage of experienced personnel</b>								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	3%	4%	3%	2%	5%	2%	1%	3%
A little threat to safety	24%	24%	25%	21%	29%	17%	16%	30%
A bigger threat to safety	40%	40%	42%	43%	37%	34%	33%	33%
A significant threat to safety	33%	32%	30%	33%	30%	47%	50%	33%

<b>Lack of effective regulatory oversight</b>								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	6%	7%	7%	6%	8%	4%	-	3%
A little threat to safety	33%	35%	40%	30%	30%	23%	15%	17%
A bigger threat to safety	40%	40%	37%	40%	39%	50%	51%	57%
A significant threat to safety	20%	19%	17%	24%	23%	23%	34%	23%

<b>Airline management experience / attitudes / culture</b>								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	5%	4%	9%	2%	10%	2%	2%	7%
A little threat to safety	28%	30%	33%	25%	22%	16%	22%	20%
A bigger threat to safety	40%	42%	36%	39%	41%	41%	48%	40%
A significant threat to safety	27%	24%	22%	34%	27%	41%	28%	33%

Airline financial health								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	6%	5%	8%	4%	8%	7%	5%	10%
A little threat to safety	35%	36%	43%	30%	29%	30%	24%	23%
A bigger threat to safety	42%	43%	34%	47%	38%	42%	44%	42%
A significant threat to safety	18%	16%	15%	19%	25%	20%	27%	26%

Rapid growth in airline size								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	13%	15%	13%	9%	19%	11%	13%	20%
A little threat to safety	44%	43%	46%	43%	45%	47%	41%	30%
A bigger threat to safety	33%	34%	35%	32%	27%	29%	28%	30%
A significant threat to safety	10%	8%	6%	16%	8%	14%	17%	20%

Airport / airway congestion								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	8%	10%	7%	6%	10%	7%	5%	7%
A little threat to safety	49%	54%	48%	45%	41%	46%	45%	43%
A bigger threat to safety	31%	28%	35%	34%	33%	37%	33%	37%
A significant threat to safety	11%	8%	11%	15%	16%	11%	16%	13%



<b>Criminalisation (criminal investigation) of accidents / incidents</b>								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	20%	21%	23%	17%	16%	20%	12%	20%
A little threat to safety	41%	42%	41%	45%	30%	35%	35%	23%
A bigger threat to safety	25%	26%	21%	24%	32%	25%	30%	23%
A significant threat to safety	14%	12%	15%	14%	22%	19%	23%	33%

<b>Fatigue / work practice (pilots, engineers, ATC etc.)</b>								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	2%	2%	3%	2%	5%	-	-	-
A little threat to safety	18%	17%	23%	20%	14%	14%	14%	10%
A bigger threat to safety	42%	43%	43%	43%	46%	35%	36%	43%
A significant threat to safety	38%	39%	31%	35%	35%	51%	50%	47%

<b>Ageing aircraft</b>								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	11%	13%	12%	11%	8%	8%	5%	3%
A little threat to safety	48%	49%	53%	44%	45%	42%	37%	40%
A bigger threat to safety	28%	28%	24%	30%	29%	33%	29%	53%
A significant threat to safety	12%	10%	11%	15%	18%	17%	29%	3%

Complacency								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
No threat to safety	4%	4%	4%	3%	6%	2%	3%	7%
A little threat to safety	28%	32%	22%	29%	21%	21%	25%	17%
A bigger threat to safety	40%	40%	41%	37%	38%	49%	37%	50%
A significant threat to safety	28%	23%	32%	31%	35%	28%	35%	27%

## Perceived drivers for safety

4.	Please rate how much of a driver for improvement each of the following are with regards to airline safety:			
	<i>Not a driver</i>	<i>A small driver</i>	<i>A bigger driver</i>	<i>A significant driver</i>
New technology (aircraft)	88 (4%)	570 (27%)	887 (42%)	565 (27%)
New technology (ground / ATC)	43 (2%)	430 (20%)	1010 (48%)	619 (29%)
Spread of industry "best practice"	59 (3%)	624 (30%)	1000 (48%)	417 (20%)
Increased adoption of available "safety equipment"	37 (2%)	379 (18%)	1001 (48%)	683 (33%)
Increase in effective regulatory oversight	123 (6%)	811 (39%)	810 (39%)	347 (17%)
Increased use of safety audits / operating bans	114 (5%)	781 (37%)	838 (40%)	360 (17%)
Spread of "Just Culture" concept	214 (10%)	896 (43%)	667 (32%)	291 (14%)
Improved ground infrastructure / aids (using existing technology)	115 (5%)	913 (44%)	836 (40%)	232 (11%)
Increased sharing of safety data / analysis	64 (3%)	600 (29%)	954 (45%)	484 (23%)
Management accountable for safety	108 (5%)	502 (24%)	801 (38%)	688 (33%)

Respondents saw “increased adoption of available safety equipment” and “management accountable for safety” as the most significant drivers for air safety. Drivers seen as less important included “spread of 'Just Culture' concept”, “increase in effective regulatory oversight”, “improved ground infrastructure/aids” and “increased use of safety audits/operating bans”.

As with “threats to safety”, respondents from the different regions had, in many cases, broadly similar views on “drivers for safety”. However, some differences in emphasis could be seen between the views of respondents from, say, Africa and Europe or North America. For example, respondents from Africa saw “increase in effective regulatory oversight” and “increased use of safety audits/operating bans” as more important than those from Europe or North America. For both drivers, 80% of respondents from Africa saw this as either a “significant” or “bigger” driver for safety. This is compared with only 54% and 43% from Europe and North America respectively who see “regulatory oversight” as important, and 55% and 51% from Europe and North America who see “audits/operating bans” as important.

One area that was seen as important for safety among all regions was “management accountable for safety”, with Africa in particular rating this highly. However, Europe-based respondents rated this less highly than those from other regions.

New technology (aircraft)								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	4%	5%	3%	3%	3%	3%	3%	10%
A small driver for improvement	27%	29%	27%	25%	14%	29%	23%	26%
A bigger driver for improvement	42%	42%	44%	40%	48%	34%	46%	32%
A significant driver for improvement	27%	24%	26%	32%	35%	34%	28%	32%

New technology (ground / ATC)								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	2%	2%	2%	1%	3%	3%	1%	3%
A small driver for improvement	20%	23%	19%	18%	13%	16%	15%	23%
A bigger driver for improvement	48%	48%	50%	48%	43%	50%	48%	37%
A significant driver for improvement	29%	27%	29%	33%	41%	30%	35%	37%

Increased spread of industry “best practice”								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	3%	2%	3%	3%	2%	2%	4%	7%
A small driver for improvement	30%	33%	31%	29%	19%	22%	17%	20%
A bigger driver for improvement	48%	46%	49%	50%	49%	47%	49%	53%
A significant driver for improvement	20%	19%	17%	19%	30%	29%	29%	20%

Increased adoption of available “safety equipment”								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	2%	2%	2%	1%	2%	2%	1%	-
A small driver for improvement	18%	18%	20%	18%	13%	19%	13%	4%
A bigger driver for improvement	48%	49%	47%	44%	59%	43%	49%	46%
A significant driver for improvement	33%	31%	32%	36%	27%	37%	37%	50%

Increase in effective regulatory oversight								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	6%	5%	9%	4%	5%	7%	1%	7%
A small driver for improvement	39%	40%	49%	33%	22%	34%	18%	17%
A bigger driver for improvement	39%	39%	32%	42%	48%	38%	45%	50%
A significant driver for improvement	17%	15%	11%	20%	25%	21%	35%	27%

Increased use of safety audits / operating bans								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	5%	6%	6%	4%	2%	7%	3%	3%
A small driver for improvement	37%	40%	42%	35%	23%	28%	17%	38%
A bigger driver for improvement	40%	40%	35%	42%	47%	41%	51%	38%
A significant driver for improvement	17%	15%	16%	19%	29%	24%	29%	21%

Spread of 'Just Culture' concept								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	10%	10%	13%	9%	6%	8%	3%	20%
A small driver for improvement	43%	43%	52%	44%	38%	30%	27%	20%
A bigger driver for improvement	32%	33%	26%	33%	43%	34%	36%	40%
A significant driver for improvement	14%	13%	9%	14%	13%	28%	33%	20%

Improved ground infrastructure / aids (using existing technology)								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	5%	5%	7%	6%	2%	4%	3%	-
A small driver for improvement	44%	46%	47%	38%	40%	37%	31%	33%
A bigger driver for improvement	40%	40%	37%	39%	47%	43%	46%	50%
A significant driver for improvement	11%	9%	8%	17%	11%	16%	19%	17%

Increased sharing of safety data / analysis								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	3%	3%	3%	3%	2%	5%	3%	-
A small driver for improvement	29%	29%	32%	30%	32%	17%	12%	24%
A bigger driver for improvement	45%	47%	45%	41%	41%	44%	45%	48%
A significant driver for improvement	23%	20%	21%	26%	25%	34%	40%	28%

Management accountable for safety								
	All	Europe	North America	Asia-Pacific	Latin America & Caribbean	Middle East	Africa	Other
Not a driver for improvement	5%	6%	5%	3%	5%	7%	4%	3%
A small driver for improvement	24%	28%	24%	18%	22%	15%	13%	33%
A bigger driver for improvement	38%	39%	38%	40%	45%	36%	35%	17%
A significant driver for improvement	33%	27%	33%	39%	28%	43%	47%	47%

## The annual Ascend airline safety perception survey

The survey was sent to a total of 66,793 aviation professionals and others with an interest in aviation and was open from 23 October 2013 through to 19 November 2013.

A total of over 2,100 completed surveys were received, of which 1,931 respondents described themselves as either working in the aviation industry (1,584 – 75%), retired from the industry (273 – 13%) or students (74 – 3%). The remaining 191 (9%), although having an interest in aviation were from outside the industry. Some 751 (35%) of respondents reported that aviation safety was their “direct responsibility”.

Paul Hayes, London, 1 December 2013, 16:00

The information contained in our databases and used in this report has been assembled from many sources and, while reasonable care has been taken, we are unable to give any warranty as to its accuracy, completeness or suitability for any purpose and the information is supplied on the understanding that no legal liability whatsoever shall be attached to Ascend Worldwide Limited, its officers, or employees in respect of any error or omission that may have occurred. In providing this data, no consideration has been made of the interests and concerns of any third party and Ascend denies any responsibility howsoever arising to any third party in the use of this data.

## Aircraft Accident & Loss Data

**No other data provider delivers the depth, range and integrity of our authoritative aircraft accident and loss information, built on 60 years of comprehensive global data.**

Aviation authorities including the International Civil Aviation Organisation (ICAO), the US Federal Aviation Administration (FAA) and the UK Civil Aviation Authority (CAA) turn to Ascend for our timely and detailed accident reports; global insurers value our unrivalled expertise in analysing safety trends and delivering reliable recommendations on air safety improvements.

Our Air Safety team uses its unique range of data, industry sources and contacts to deliver tailored-made solutions and provides immediate assistance to any air safety related enquiry. Our safety databases, specialist reports and services include:

### World Aircraft Accident Summary (WAAS)

Researched and published on behalf of the UK CAA, WAAS includes detailed descriptions for over 10,000 accidents involving jet- and turbo-powered aircraft, as well as helicopters.

### Jet Operator Statistics (JOS)

Accident and exposure statistics covering more than 45 years, across more than 1,200 airlines, available as a comprehensive database or as a tailor-made subset.

### Special Bulletin

When a major accident occurs, Ascend promptly publishes a Special Bulletin summarising all the available information about the event, following up with quarterly updates and a special end-of-year report.



## Airliner Loss Rates (ALR)

ALR provides annual figures for all major airline types covering the different measures of exposure and five-year accident rates.

### The aviation industry relies on Ascend and Flightglobal for the most reliable and up-to-date information and insight available

For almost five decades, our international team of experts has delivered independent and trusted advice to help companies achieve results and drive profitable performance.

Our market-leading products and services include:



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All over the world, tens of thousands of market opinions are sought using Ascend information. Our rich source of proprietary data sources and analytical capabilities are second to none.

### Contact us

**Email:** [insight@flightglobal.com](mailto:insight@flightglobal.com)

**Twitter:** [Twitter.com/AscendAviation](https://twitter.com/AscendAviation)

**LinkedIn:** LinkedIn group 'Ascend – Air Safety & Insurance'

**Web:** [www.flightglobal.com/SafetyReports](http://www.flightglobal.com/SafetyReports)