

LEARN HOW TO  
COMPLETE YOUR MISSIONS  
AND STAY OUT OF TROUBLE

# How Safety Works

**Apply 52 Proactive Safety Principles  
to create an outstanding  
Safety Culture and Performance**

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More information about Wingstar Institute, its publications, and services is available at the website of Wingstar Institute B.V.

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To my wife Bea and my sons Joris and Wouter.  
You're the most precious people in my life.

and

**TO ANYONE WILLING  
TO TAKE FULL RESPONSIBILITY  
FOR HIS/HER BEHAVIOR.**



# Introduction

It is a well-known fact that about 8 out of 10 accidents (80%) are caused by HUMAN ERRORS. This should not be a surprise because most of the time we're dealing with human activities. But there is a 'flipside to this coin'; **humans are also a great resource to prevent them.**

Another fact is that, after detailed investigation of incidents and accidents, it appears that most of the accidents, in which human errors were made, could easily have been prevented. This fact only makes their acceptance even sadder and more difficult. But at the same time, it also shows that **with the right knowledge and insight we're able to proactively improve our safety.**

Nobody wants to be involved in an incident or accident and certainly not become a victim. Everyone has an intrinsic motivation to do safe work. That is how it should be. No one should be at ease with unsafe conditions, incidents, and accidents.

Over the centuries, knowledge has been transferred from one generation to the next. In many areas, we know the master-student principle, where the new generation learns the tricks of the trade from an old rot.

As Eleanor Roosevelt said: "Life is not about expecting, hoping and wishing. It is about doing, being, and becoming. Learn from the mistakes of others. You can't live long enough to make them all yourself."

This book brings together the wisdom I have gained during my long professional aviation career and passed it on to anyone who wanted to absorb it. It is my gift to the world to make it better and safer.

The content is limited to the - in my opinion – **52 most important proactive Safety Principles**. That means that I had to set priorities, make tough choices, and focus as much as possible on what is important to you. The result is quite impressive and represents the best 'need-to-know' knowledge for present and future generations.

In addition to these Safety Principles, I have added a series of Safety-related Quotes from great minds. They are based on old values and wisdom and therefore definitely deserve a place in this book.

To add a cheerful touch, several cartoons have been added. These are meant to put a smile on your face and remind you not to take it all too heavy. Proactive safety management should be an easy and joyful activity.

**The best investment you can make in life is an investment in yourself** – in your knowledge, insight, and experience. I am convinced that you greatly benefit from the insights in this book.

I wish you a happy, healthy, inspiring, and safe life. Proceed with confidence on your path into the future.

Geert Hulshof, 2022

PS. With over 8 billion people on this planet, it may be difficult to reach everyone. That is why I have set a cautious first target of 250.000 books sold. I assume that I should be able to reach that target easily and quickly. Right?

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# How to get the most out of this book

This book contains **52 Safety Principles** that you should use to build or improve a Safety Culture and to demonstrate outstanding Safety Performance. These principles apply to any Aviation Service Provider (e.g., Aircraft Operators, Maintenance Organizations, Fixed-Based Operators, and Air Traffic Units).

You may already be familiar with some of these Safety Principles, but there will probably be many that are new to you.

## **Proactive**

All Safety Principles should be applied proactively. This means that an accident or incident does not have to happen first before you can improve safety. I am convinced that if all 52 Safety Principles are successfully applied within your crew and organization, you will have an excellent Safety Culture. As long as that is not the case, there is room for improvement and this book will be a source of inspiration for you.

## **Think for yourself**

It is important not to assume anything blindly, but first to think about it for yourself. What does such Safety Principle mean to you personally and to the conduct of your missions?

Ask yourself the following questions:

- Which ones are the most important to you and why?
- Which ones do you disagree with and why?
- Which ones do you not understand well?

## **Talk about it**

Discuss the Safety Principles also within your crew and your organization. Mutual communication and alignment lead to a better understanding and a correct translation to the unique context in which you, your crew, and your organization operate. You learn a lot if, in addition to the knowledge from this book, you also know the knowledge and opinions of your colleagues. How cool is that?

Use this book with your Crew Resource Management (CRM) training.

### **Start-Stop-Continue**

After you have thought and talked about it, three conclusions are possible:

- **START** – you have learned something new that you are excited about, and you decide to adjust the way you carry out your activities from now on accordingly.
- **STOP** – you have learned that your existing way of working is not the right one. You decide to make that known within your crew or organization and insist on doing things differently from now on.
- **CONTINUE** – you have received confirmation that your current way of working is correct and that you should continue with it.

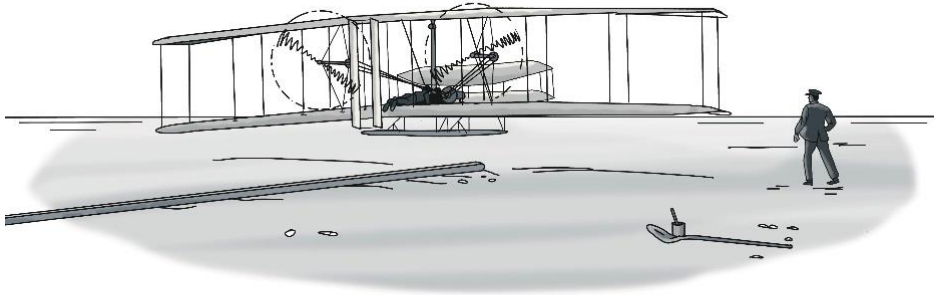
### **Safety Manager**

As a Safety Manager, you should use the 52 Safety Principles as inspiration for Safety Briefings and Training. This way you have a new safety topic for every week in the coming year. Then you repeat them until they are on everyone's mind. Trust me, this may take some time.

You should also use the Safety Principles as a basis for setting unique Safety Objectives to proactively improve safety within your organization. In addition, you may use it as a reference when creating Safety Cases and evaluating occurrences. In this way, the knowledge from this book contributes to the effectiveness of your Safety Management System (SMS). Remember:

KNOWLEDGE ONLY HAS VALUE IF IT IS APPLIED.

Note: In this book, I use the terms Crew and Crew Members because it is common in aviation. But of course, it applies to all operational teams and team members dealing with hazards, risks, high workloads, and all kinds of stress factors.



The Wright Flyer,  
December 17, 1903,  
Kitty Hawk, South Carolina, USA.

“In flying, I have learned that  
carelessness and overconfidence  
are usually far more dangerous  
than deliberately accepted risks.”

Wilburg Wright

# 1. How it all began (1912)

A lot has changed since the early days of aviation. Aircraft have become faster, bigger, heavier, safer, and more efficient. The training of technicians and pilots has improved considerably over many generations. One thing goes through the history of aviation as a common red thread: the respect for the air, its elements, and the dangers and risks to which we are exposed. From the very beginning, aviation professionals are committed to safety.

I have come across a 1912 book written by the English aviator Claude Grahame-White. It is about the state of the aviation industry at that time – nine years after the Wright brothers made their first motorized flight in 1903. Aviation was still in its infancy – but safety awareness was already present to a large extent.

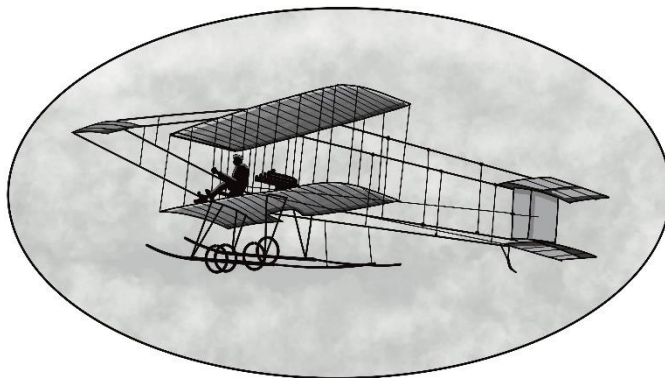
Below are some remarkable passages from this old book.

*“... What the airman must always remember when he is in flight is that he cannot afford to make mistakes. Momentary forgetfulness, or some carelessness, may easily spell disaster when you are at the levers of an aeroplane. A pilot, in fact, always needs to keep his wits about him.”*

*“... It has always been my contention that, provided one flies with judgment and does not attempt difficult or dangerous feats, piloting a modern-type aeroplane presents no more danger than driving a motor-car. But the dangers of flying are very real ones when a pilot loses his judgment and attempts all sorts of reckless and ill-advised flights.”*

*“... When one bears in mind such facts as these, it is not surprising that aeroplane accidents have happened. It would, indeed, be most remarkable if they had not. Here we have men, after centuries of failure, suddenly provided with a means of flying through the air high or low, in wind or in calm, each according to his own wish. And we must remember that, to those who treat it carelessly, the air is a treacherous foe. It is full of death-traps in the form of sudden gusts*

*and eddies. The wind-gusts, indeed, seem to lie in wait for the pilot who is not cautious, and sooner or later they catch him unawares.”*



*“... We are all of us novices still in regard to the conquest of the air. But it is the man who has gone right through the mill who makes the successful flyer. The happy-go-lucky man may make a brilliant flight, it is true, but he is not the reliable, everyday type of pilot that aviation so sadly needs. What we want to turn out is a man who flies today, and tomorrow, and next week, and all the year round, and who does not smash himself up in some spectacular feat. He is the man who is going to carry aviation forward not the devil-may-care type of airman who gets into his machine without looking to see that everything is all right, who knows nothing about his motor and does not care to learn and who simply drives his aircraft anyhow, and trusts to luck. He certainly has any amount of pluck; but he is not an airman of the lasting, successful kind the type of man I, for one, want to see produced by the flying-schools.”*

**SAFETY AWARENESS AND COMMITMENT  
ARE IN THE DNA OF EVERY AVIATION PROFESSIONAL.**

This is how it has always been and will always remain.

## SAFETY

“Safety should never be a priority.  
It should be a **precondition.**”

Paul O’Neill

## 6. Everyone makes mistakes

The term 'Human Error' is used to indicate an error as a result of human action. Everybody makes mistakes. No one goes through life without mistakes, so do not worry about it so much.

I am not happy with the term 'mistake'. The term has negative implications. What is a mistake? A mistake is nothing more than an unwanted result of your action. This sounds a lot friendlier.

### Learning

Making mistakes is even an essential part of the learning process. If your action produces an unwanted result, you correct it, right? Try again. Find another solution. Do it differently next time. You cannot learn without making mistakes.

Do not only learn from your own mistakes, but also the mistakes of others. Learning from other people's mistakes is very safe – this way, you are not the one exposed to the risk.

### Tolerance towards errors

People will always make mistakes. It, therefore, doesn't make sense to work towards a situation in which no mistakes are allowed. Making mistakes is acceptable, as long as it does not cause injury or damage, a hazardous situation, or an incident. We can even take it one step further by saying: as long as our mission (objective of our activities) is not hindered by it. This creates a certain tolerance toward errors.

Commit yourself to the following four objectives:

- (1) **REDUCE** the number of mistakes to a minimum.
- (2) **CORRECT** identified mistakes at the earliest stage possible.
- (3) **LIMIT THE CONSEQUENCES** of mistakes made, if possible.
- (4) **LEARN** from mistakes.

Achieving these four objectives is termed 'Error Management' and can be pursued by anyone, anytime and anywhere.

NO REGRETS IN LIFE.  
ONLY LESSONS LEARNED.



“This is not a disaster ...  
... just a learning experience.”



## 7. Be smarter than a monkey.

Often it is necessary to think out-of-the-box to come to a new insight. Let yourself be inspired by the animal world. What can you learn from the behavior of monkeys to improve your safety? After all, we stem from them. We are not more flexible than monkeys, but we are a lot smarter. Or not ...?

Imagine a scientist researching in collaboration with a zoo on the behavior of monkeys. Her experimental setup consists of a large cage with in the corner a kind of tribune where the monkeys can sit and lie. In the middle of the cage, a staircase is placed. Directly above the staircase a fresh bunch of bananas hangs from the ceiling every day. On the stairs, a pressure sensor is attached and whenever it's activated, both the monkey on the stairs and the monkeys on the tribune get an ice-cold shower.

The test starts with a group of four monkeys. Out of curiosity, it doesn't take long before the first monkey goes up the stairs to catch a banana. Immediately this one, but also the other three monkeys get an ice-cold shower. While screaming and shivering they all run through the cage.

After some of those bad experiences, the monkeys are aware that a cold shower is linked to climbing the stairs. As soon as a monkey wants to make a new attempt, the other monkeys intervene hard. Nobody wants an ice-cold shower and the one who tries it gets a huge punch from one of the others, well before the stairs are reached.

Now that the monkeys have understood this, it is time for a change in the composition of the group.

One monkey is replaced by a new one. This newcomer has no experience with the cold shower yet, but every time he wants to climb the stairs for a banana, the others hit him hard from the stairs. After a while he gives up - he has learned that you get hit when you want to climb the stairs. The new monkey has adapted.

Again, a monkey from the original group is replaced by a new one and history repeats itself. After this one too has adapted, the third monkey is replaced by a new one. There is now only one monkey left from the original group. Only this one has a negative experience with the cold shower. The other three monkeys don't dare to climb the stairs out of fear of being hit.

When eventually the last monkey is exchanged for a new one, the group consists only of monkeys who have no interest in the stairs and the bunch of bananas. They walk around it with a big bow. None of the present monkeys can explain why – a remarkable situation.

"IT HAS BECOME A HABIT – THAT'S HOW WE DO IT HERE."

The result of this research with monkeys is unfortunately also applicable to many people. Usually, we learn as newcomers in the profession from our older and more experienced colleagues, coaches, instructors, or employer how to do it. Without asking why we take the practices and working methods for truth and copy the desired behavior. We are imitating our colleagues, and everyone is satisfied.

It does not seem too smart to simply adopt behavior without even considering the question 'WHY? This limits creativity and innovation but also has a negative effect on safety. First, something bad must happen before we wake up and start wondering why it happened to us.

Take nothing for granted but be critical. Always ask why something must happen that way. Familiarity with 'why' provides insight into possible safety risks to which you may be exposed.

**ALWAYS QUESTION THE STATUS QUO.**

Research shows that many accidents and incidents could have been prevented if someone had asked the "WHY?" question in time. Safety is not created by simply copying others. Make sure that you're smarter than these monkeys.



“Don’t be afraid to  
ask **stupid questions.**

They are easier to handle  
than **stupid answers.**”

Author unknown

## 8. Know your ABCs.

Every now and then, an unintentional event occurs which results in an error, undesired outcome, miscommunication, frustration, unsafe condition, or a customer complaint. Due to the nature of our operations, most of them are still caused by Human Error. This is nothing new and has already been known for centuries. Apparently, we're having a hard time passing learned lessons on to future generations.

### Root causes

If we look at the root causes of many Human Errors, two types are frequently mentioned.

- (1) Assuming
- (2) Believing.

### Assuming

One of the reasons for Human Errors is an assumption.

- "I assumed that she had checked it."
- "I assumed that he did it."
- "I assumed that I was capable of doing this job."
- "I assumed that she understood me."

The well-known English proverb: "Assumption is the mother of all screw-ups" is based on a long tragic history. An American variant is: "Assume makes an ASS out of U and ME".

### Believing

Another reason for Human Error is simply believing someone or something.

- "He told me his story and I believed him."
- "I believed her on her blue eyes. If she says so, so it be."
- "I believe the instructions are correct."
- "I always believe and trust the calculations from the Flight Management System."

Not everybody communicates clearly and unambiguously. The truth is not always spoken. Every story is colored by personal interpretations and interests.

For computers, the GIGA principle applies (garbage in > garbage out). The quality of the output is determined by the quality of the input. The same goes for communication.

### **Mantra**

It's time we eliminate these two root causes from our operations.

One effective mantra to prevent the trap of assumptions and beliefs is knowing your ABCs:

- A = ASSUME NOTHING
- B = BELIEVE NOTHING
- C = CHECK EVERYTHING

This mantra is used in police and forensic investigation, but also in accident and incident investigation. It is amazingly effective in the prevention of incorrect decisions and conclusions.

“Know your ABCs” has a much wider application and, to my opinion, should be embraced by everyone. Not that you should become paranoid or mistrust everyone and everything, but a healthy dose of suspicion is never wrong. History teaches us, that this is even necessary.

**MOST STUPID MISTAKES  
CAN BE PREVENTED OR CORRECTED  
BY KNOWING AND APPLYING THE ABCs.**

Use this mantra to your advantage and add it to your personal safety toolbox. In proactive safety management, there is no place for assuming and believing.

“A person always has  
two reasons for his actions:  
a **good reason** and the **real reason.**”

J.P. Morgan

## **28. Never underestimate the power of the present**

The present is all you have. Everything you have done and achieved so far has been realized in the present. The future and the past do not exist in the physical world. They only exist in your mind. The present is the only thing that exists.

### **The past**

You cannot change the past. It is nothing more than an experience – a memory. It, therefore, does not make much sense to dwell on the past for a long time. Accept the past as it is and let go of it. Make sure you are not stuck in the past, no matter how severe certain events are. Use the experiences from the past (positive or negative) and use them to make better decisions and do the right things.

### **The future**

Nothing has ever been realized in the future. Everything is created exclusively in the present. Make sure you are not too concerned with the future in your mind. You can make plans and have future goals, but the only way to achieve them is by acting now.

THE PRESENT IS THE ONLY THING YOU HAVE.

### **Focus on the present**

A prerequisite condition for creating safety is that you maintain a razor-sharp focus on the present. Keep your attention on the task at hand and don't let your thoughts stray away. If you do this anyway, you will immediately lose Situational Awareness and will be lagging behind the facts. The same is true when you are too concerned with the near future.

Remember, your physical body only exists in the 'now'. All events take place in the 'now'. Exposure to hazards only happens 'now'. Safety should be realized 'now'. So, stay focused and be alert.

YOU LIVE NOW, SO ACT NOW.





### **33. A Second Opinion contributes to your success**

A second opinion is a very powerful method of nipping errors in the bud. Unfortunately, it is still used so little. A missed opportunity because the consequences of mistakes may be considerable. Think of personal suffering, material or financial damage, liability, and damage to reputation. Many an Ego resents a second opinion and finds that it detracts from its competence and authority. It is therefore time to reflect on the benefits of a second opinion.

The best is when you perform your activities flawlessly. The result is instantly right. Unfortunately, no one is perfect, and you have to deal with all kinds of Human Factors. On your own, you can never completely avoid mistakes - no matter how hard you try. That's why you need the help of someone else. Some Egos have difficulty with this and see it as a personal failure when they ask for the opinion of another crew member.

#### **Successful Professional**

What ultimately matters are the results of your decisions and actions. To achieve a good result, there are all kinds of safe professional practices available. A second opinion is simply one of them.

A SECOND OPINION  
IS AN EFFECTIVE AND INEXPENSIVE METHOD OF  
PREVENTING HUMAN ERROR.

A second opinion can compensate for a gap in specific knowledge and experience. It can timely challenge an error of judgment, a wrong choice, bias, or complacency. Also, decisions based on wrong motives (such as hidden agendas) can be discovered and corrected in time by a second opinion. Through interaction with other professionals, your decisions will be of better quality. When in doubt, always ask for a second opinion.

The use of a second opinion makes an important positive contribution to your safety performance and your status as a successful professional.

### **Better-valued crew member**

In addition to improving your results, a second opinion also improves your knowledge and understanding. If you are open to the opinions of your colleagues, you will gain a different and unique perspective on the situation. Learn from the insights and opinions of your fellow professionals. Listening to and learning from your colleagues will even make you a better-valued crew member.

### **Prerequisite condition**

The only prerequisite condition for a second opinion is that the other person has similar expertise, has his or her own opinion (independent), and is sufficiently assertive. If the other person is influenced by you in any way, you will not get an independent and objective opinion. Such a second opinion is then as good as useless.

### **Proactive**

A mistake has not been made until you have taken action. You always ask for a second opinion during the Preparation Phase – BEFORE you take action. That is why a second opinion is such a powerful proactive method. There are no disadvantages to using a second opinion.

At most, a second opinion takes a little extra time, but that is negligible compared to the time (and money) it takes to fix your mistake.

A SECOND OPINION SHOULD BE MANDATORY  
FOR EVERY DECISION AND EVERY ACTION  
WHERE THE RESULT IS IRREVERSIBLE.

Always ask for a second opinion when the situation permits this. Challenge yourself, and then enjoy better results.

My father always used to say:  
"We learn from our mistakes."

I assume you are  
only child.



## 34. Irreversible Actions

Errors can only be corrected if the results are reversible. If this is not the case, extra caution is required.

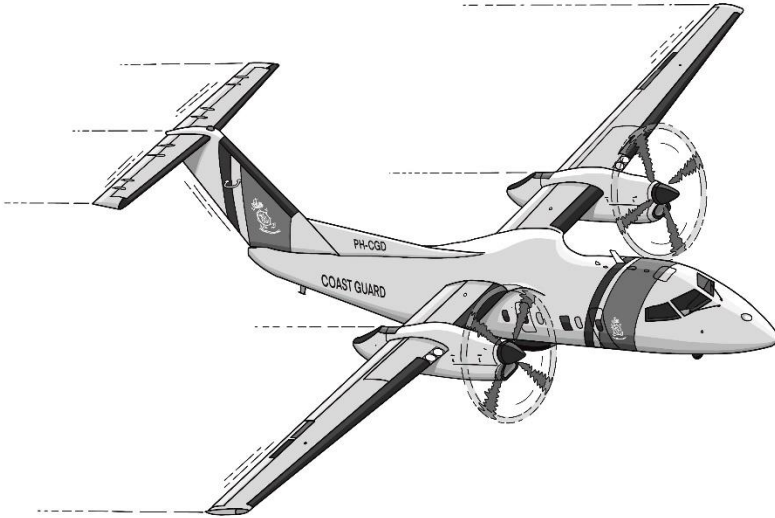
Examples of irreversible actions are:

- Lowering the aircraft's landing gear without hydraulic pressure ('free fall by gravity').
- Dropping a smoke marker or life raft from an aircraft during a search and rescue operation.
- Launching an air-to-air or air-to-surface missile.
- Dumping fuel in-flight.
- Cutting a cable.

### SVDR procedure

In case you have to act, of which the result is irreversible, apply the SVDR procedure as a crew.

- (1) **STATE** – State your intention (action).
- (2) **VERIFY** – Verify whether the intended action will indeed achieve the required result. Think before you act.  
If you are part of a crew, this is the time when the other crew member should intervene to correct an error. Reply with either "CHECKED" or "STOP".
- (3) **DO** – Carry out the intended action.
- (4) **RESPOND** – Identify and confirm the result. This conscious feedback increases Situational Awareness of yourself and the other crew members.



### **Crew coordination**

Proper crew coordination for applying the SVDR procedure is:

	<b>Crew Member #1</b>	<b>Crew Member #2</b>
(1)	<b>STATE</b>	
(2)		<b>VERIFY</b>
(3)	<b>DO</b>	
(4)		<b>RESPOND</b>

**WHEN RESULTS ARE IRREVERSIBLE,  
VERIFY BEFORE YOU ACT.**



## SAFETY CONCERN

“A concern for safety  
which is sincerely held  
and repeatedly expressed,  
but nevertheless,  
**is not carried through into action,**  
is as much protection from danger  
as no concern at all.”

Sir Anthony Hidden

## 45. SAG, it's time for action

Most simple safety issues in missions or activities can be solved by the Responsible Manager himself. But for more complex issues it is wiser to put together a team of experts. All available knowledge, insight, and experience within the organization are then required. Such a team of experts is called a Safety Action Group, or SAG for short. Usually, the people who participate in a SAG are also the ones who will carry out the missions or activities (or a representative thereof).

### Deployment

The SAG is composed, convened, and directed by the Accountable Manager. The SAG may be deployed both proactively and reactively.

- **PROACTIVE** - Establishing a Safety Case for each new activity or mission. Based on a Safety Case, the SAG determines in advance how a mission or activity should be carried out to achieve the mission objectives while achieving an acceptable level of safety.  
You may also use a SAG to address all kinds of operational and safety challenges.
- **REACTIVE** - To evaluate and improve an existing Safety Case in response to advancing insight as a result of experience gained, operational performance, reported incidents and occurrences, or proposals for improvement received.  
The SAG may also be used to investigate incidents, occurrences, or audit findings to determine the root cause and then eliminate it.  
The SAG may also conduct a self-assessment on first-line activities.

The SAG has the greatest impact within your organization on how safety is organized proactively. It is the first of the three 'firewalls' of proactive safety management (see § 17).

A SAFETY ACTION GROUP DETERMINES  
THE WAY SAFETY IS ORGANIZED.



The reactive deployment also makes an important contribution to improving safety performance. By sharing and evaluating our insights and experiences with the current operation, we learn and improve.

THE SAFETY ACTION GROUP MEETS ONLY  
WHEN AN ACTION IS REQUIRED - SOMETHING NEEDS TO BE  
FIGURED OUT, ARRANGED, ORGANIZED, CHANGED, OR IMPROVED.

If not, the SAG is of no use. Don't change for the sake of changing. Leave something untouched if it just works well. Sometimes a well-intentioned improvement action is actually a risk that can backfire.

IF IT AIN'T BROKE, DON'T FIX IT.

A SAG always has a temporary character. Once her task is completed, the SAG is canceled.

### **Composition**

The SAG consists primarily of participants involved in the preparation, planning, and execution of missions. In the three-line model (see § 43), these are first-line staff and crew members. The SAG consists of at least:

- the Responsible Manager; and
- subject matter experts.

The SAG may be expanded with experts from the second line. They have an advisory and coaching role:

- **Safety Manager** - advises on identifying hazards, performing risk assessments, correctly interpreting the organization's risk appetite, and applying it to the Safety Case. In addition, he advises on how the established risk-mitigating measures are correctly expressed in the SOPs. The same applies to the correct wording of the associated Warnings, Cautions, and Notes.

- **Compliance Monitoring Manager** - advises on which laws and regulations apply to the Safety Case and how to comply with them (for example by drawing up SOPs or keeping records). He also advises on the availability of relevant industry Standards And Recommended Practices (SARPs).

Limit the number of participants in a SAG. This increases efficiency. Practice shows that a group size of 6-8 people is sufficient.

The composition of the SAG depends on the topic or Safety Case for which specific expertise is required. Each participant should have added value to the group because of his knowledge, insight, and experience. In certain cases, it may be necessary to involve subject matter experts from outside the organization.

#### THE COMPOSITION OF THE SAG VARIES DEPENDING ON THE NEED.

#### **Benefits**

There are many things that you as a Responsible Manager can decide for yourself. But when it comes to safety, it is wise and necessary to call a SAG together. In doing so, you arrange your very best "second opinion" (see § 33) and you make it a lot easier on yourself.

A well-functioning SAG has many advantages:

- As the Responsible Manager, you are not alone, but you call on the help of your team (subject-matter experts) and second-line experts.
- As a team, we think and discuss the challenges together and thereby make optimal use of the available expertise in the organization.
- The identification and assessment of hazards and risks are easier.
- Risk mitigation measures are immediately assessed for effectiveness and feasibility.
- Conscious thought is given to risk appetite and achieving an acceptable level of safety.

- Blind spots (gaps in knowledge and understanding) and hidden agendas are corrected so that decisions are better.
- We learn with and from each other, which increases everyone's expertise.
- Jointly we arrive at a judgment and plan of action.
- There is immediately firm commitment to the decisions taken ('MISSION GO / NOGO') and the plan of action.
- Communication and coordination between management and staff are easier and more efficient.

### **Positive and inspiring**

Participating in a SAG is a valuable, inspiring, but also motivating challenge. Your organization needs your insight and expertise. That means you need to have an opinion – a vision. Let everyone hear what you think. How good are you in your field?

It gives tremendous satisfaction to make a positive contribution together to mission accomplishment and safety.

**RECOGNIZE THAT YOU HAVE VALUE TO YOUR ORGANIZATION  
WHEN YOU ARE INVITED TO A SAFETY ACTION GROUP.**

**GO FOR IT AND SHOW YOUR VALUE.**

# SAFETY ACTION GROUP MEETING

Come on, we all know how serious this is.



## 46. The Noble Archer

In the Middle Ages, England was home to a noble knight who wanted to impress his King. He wanted to be the best archer of all knights. Every day he practiced and became better and better.

One day, when he rode his horse through a village on his way to the castle, he came across several trees on which targets were painted. In each target was an arrow with the tip exactly in the rose. "Who is that shooter," he asked the villagers jealously. "Oh, that's the best archer in our Kingdom" they replied smiling. "Nobody can shoot better with bow and arrow than he'.

"Hmmm", the knight thought jealously, "I need to practice more". But no matter how much he practiced, each time the knight came across another target with an arrowhead exactly in the middle of the rose.

Frustrated and irritated, he finally told the story to the King and the other knights during an evening meal in the castle. Immediately everyone started to laugh. One of the knights then gave the redeeming answer: "This archer is our court joker. He always first shoots an arrow into a tree and then paints the target around it. He has fooled us all in that way.



"Keep an eye on him," said the King. "He teaches us not only to look at results but also how they were achieved.

\* \* \*

A GOOD SAFETY PERFORMANCE MAY GIVE A FALSE PERCEPTION OF THE ACTUAL LEVEL OF SAFETY YOUR ORGANIZATION IS AT.

As the joker taught the knights centuries ago, it is still necessary today to look at how safety results were achieved.

Look at (a) your decision to perform an activity and (b) the results of your activity. There are four possibilities as shown in the matrix below.

		RESULT	
		GOOD	UNDESIRED
DECISION	GOOD	(1) WELL DONE	(3) BAD LUCK
	WRONG	(2) LUCKY	(4) DONE WRONG

- (1) **WELL DONE** – your decision was good, and the result was also good.
- (2) **LUCKY** – your decision was wrong, but luckily the result was good.
- (3) **BAD LUCK** – your decision was good, but the result was undesirable (or wrong).
- (4) **DONE WRONG** – your decision was wrong, and so was the result.

A good decision is no guarantee of success. All decisions are made in uncertainty. There is always a chance that the result will differ from your intentions. To judge whether your decision was right or wrong, you should evaluate the decision process and not the results. Look only at the situation at the time of the decision and the period that preceded it. The results are less important - they were unknown at the time.

This immediately highlights the difference between proactive and reactive safety management. With proactive safety management, we focus on the decision-making process and try to increase the chance of good results. In reactive safety management, we learn from the results afterward to do better next time.

So, the fact that an organization has never had an accident does not mean that it has a safe operation. An organization that has had an accident does not have to have an unsafe operation.

MAKE SURE YOU KNOW  
HOW A SAFE OPERATION IS ACHIEVED.  
DON'T LET IT DEPEND ON LUCK.

**“Measuring safety performance  
by the number of injuries you have  
is like measuring parenting  
by the number of smacks you give.”**

Dr. Robert Long





“You may choose  
to put your head in the sand,  
but **you cannot say**  
that you did not know.”



# Acknowledgments

First of all, I would like to thank you, the reader, for purchasing and reading this book. I am sure it will provide you with valuable insights.

All the knowledge and experiences I have gained throughout my life in the field of safety form the basis for this book. I have learned an enormous amount from friends, colleagues, instructors, examiners, specialists, and subject-matter experts. It would go too far to thank them all personally, but without their conscious and sometimes unconscious contributions, I would never have been able to put this knowledge on paper.

I make an exception to the above. I would like to thank Jo Herberigs (safety expert) for reading the first version of the book in great detail. Thanks to his positive feedback and many suggestions for improvement, this second version is even better than the first.

It is a privilege to be able to work as part of a team, to contribute, share, succeed, learn, explore, and continue to develop myself.

Finally, I thank my wife Bea for her inexhaustible support, enthusiasm, and joy in life.

**I am a happy person.**

Geert Hulshof, 2022

## About the Author

Geert Hulshof has over 40 years of experience in aviation. He has obtained a BSc degree in Aeronautical Engineering at the technical college with a specialization in Safety and Human Factors.

His professional flying career has begun at the Royal Dutch Naval Aviation on the Lockheed P-3C Orion. During his active service as pilot and aircraft commander with Squadron 320, he was also Flight Safety Officer and was responsible for the Safety Program within the squadron. During that period, he completed the EURO/NATO training for the investigation of accidents and incidents.

After his military flying career, he switched to the Dutch Civil Aviation Authorities in 1995. There, he is an inspector-pilot overseeing the flight operations and the implementation of training and checking programs of commercial and non-commercial operators, and training organizations.

In 1997, he switched to entrepreneurship and started a successful commercial operator with business aircraft along with two business partners. In his role as Director of Flight Operations & Training, he is responsible for safe flight operations, regulatory compliance, aircraft acceptance, and the training and checking of crewmembers.

Geert holds an Airline Transport Pilot License (ATPL), Type Rating Instructor (TRI), and Examiner rating (TRE). He has flown on one, two, three, and four-engine aircraft and has experience on propeller and jet engine-powered aircraft. In addition, he has experience with global flight operations, commercial, non-commercial, and specialized operations (SPO).

In 2012, he completes his studies in Enterprise Risk Management at The Hague University achieving the title 'Master Risk Management' (MRM). His thesis is on the design and implementation of a proactive management system within a small to medium-sized enterprise.

Geert is convinced of the benefits of a management system for small and medium-sized enterprises and likes sharing his knowledge and expertise with others. He wants to help entrepreneurs and managers in the design, implementation, and continuous improvement of their management systems, so that everyone may benefit from the many advantages. This way, he actively wants to contribute to a better and safer world to live and work in.

He ended his professional flying career in 2015 to fully focus on further developing Wingstar Institute and coaching, directing, and supporting its customers. He gets better at that every year.



## About Wingstar Institute

Wingstar Institute was founded in 2013 by Geert Hulshof in the Netherlands (EU) and is an educational organization. It provides knowledge, insight, direction, and support related to integrated management systems, which includes proactive safety management and service excellence.

Through co-creation with our customers, we ensure continuous improvement, innovation, and adaptation of our products and services. We always challenge the status quo and are ambitious and eager to learn.

To help you succeed, Wingstar Institute provides actionable in-depth courses and carefully selected tools and resources you need to realize your mission, build a winning and uplifting culture, and improve the value you provide to your customers.

By making it extremely affordable for you to access the latest and best knowledge and training, you may quickly begin to improve your own performance and that of your organization.

Our slogan:

**Turn Passion Into Performance.**

More information about Wingstar Institute, our activities, services, and products can be found on our website:

[www.wingstar.nl](http://www.wingstar.nl)

## Notes