

FOCUS

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SPECIAL EDITION



***Strengthening Fundamentals
Through Team Excellence***



THE RSAF ANNUAL SAFETY CONFERENCE 2024

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Foreword

From Head Air Force Inspectorate



BG Kelvin Fan
Chief of Air Force
(CAF)



COL Nick Wong
Head Air Force Inspectorate
(HAFI)



ME8 Timothy Yap
Head Air Engineering and Logistics
(HAEL)



BG Teo Soo Yeow
Head Air Operations
(HAO)

The RSAF Annual Safety Conference (ASC) 2024 was held at the Air Force Training Command Auditorium on 28 Mar 2024 to review the RSAF's safety achievements for WY23/24 and chart the way forward for WY24/25. Following presentations from CAF, HAFI, HAEL, HAO, guest speaker ME8(RET) Lee Ling Wee provided participants with a clear understanding of the RSAF's safety focus for WY24/25.

In this issue of **FOCUS**, we will present the four speeches from our RSAF leadership that were shared at the conference. First, CAF shared that the RSAF should learn from safety accidents happening around the world. He then goes on to share 3 habits that would help to enforce safety: **Be Curious, Be Critical** and **Create Capacity**. I believe that internalising these habits will undoubtedly assist in creating a safe workplace environment for us all.

Next, I spoke about the state of safety in our Air Force: the safety performance in WY24, the "cycle of accidents" as well as significant Human Factors incidents. Further, I shared on our safety culture, initiatives by AFI to assist our units, developments in our Workplace Safety and Health as well as the Key Areas of Focus for WY24/25.

In the third article, HAEL reviewed the indicators of logistics safety and quality indicators, and shared with us his framework to ensure safety: SAFE. **Situated precisely, Assessed vigilantly, Followed Through** proactively and **Entrenched** consistently.

Finally, we hear from HAO, who reflected on the WY23's safety incidents, both good and bad. He then went on to share his 5-point mantra towards flying safety and his thoughts on the coming year and encouraging our personnel to strive for an accident-free year.

As we gear ourselves up for the new work year, let us embrace our new annual safety theme: **"Strengthening Fundamentals Through Team Excellence"**. Despite the incidents we had in the previous WY, I am confident that we can continue achieving our zero accident goal by ensuring **Mission Success, Safety Always, and having our people at heart**. I look forward to hearing more heartening stories of how our personnel go above and beyond to achieve safety goals.

COL Nick Wong Wai Him 
Head Air Force Inspectorate

Signing of the RSAF Safety Policy



The RSAF Annual Safety Conference began with the signing of the RSAF Safety Policy by CAF and the Command Commanders. The policy is a written statement of the RSAF's commitment to protecting our airmen and airwomen and serves as a reminder of our RSAF Safety Philosophy. By signing the RSAF Safety Policy, our Air Force Leadership pledges their commitment to keeping our people safe. It also reminds us that we all have a role in keeping each other safe and ensuring that our missions succeed with safety in mind.



From left to right: COL Liew Boon Ping (COMD AFTC), BG Koh Ee Wen (COMD ADOC), BG Lim Kok Hong (COMD ACC), BG Kelvin Fan (CAF), BG Amos Yeo, (COMD APGC), COL Marcel Xu (COMD PC), COL John Samuel (COMD UC)

Chief of Air Force's Speech



BG Kelvin Fan
Chief of Air Force



Opening Remarks

FCC members, distinguished guests, men and women of our Air Force, a very good afternoon to you all. It is great to be back in the Air Force and to see everyone here for our Annual Safety Conference. Thank you for joining us today as we gather as an Air Force with our defence industry partners to share, learn and internalise safety lessons with the common goal to prevent the next accident.



Learning from Incidents

At the beginning of this year, we heard and saw the tragic accident at Haneda Airport. Some of you might even have been on holiday in Japan at that time. Five lives were lost in a collision between the Japanese Coast Guard aircraft and Japan Airlines Flight 516. Are the Japanese known to have a poor safety record? No. They have technologies in place and are known to be attentive to details. Investigations are still ongoing so we don't have definitive answers, but there are some preliminary insights that we can and must learn from.

First, there seemed to be failure at the team level. For 40 seconds, the Japanese Coast Guard aircraft remained in the middle of the runway. Yet, no one noticed that it was not supposed to be there. Not the air traffic controllers. Not the people in the Coast Guard aircraft. Not the pilots in the Japan Airlines aircraft that was approaching that same runway. In short, the team didn't work.

Second, there seemed to be some failure at the individual level. The Coast Guard pilot entered and lined up on the runway, despite having been told by the controllers to "hold

short". Why? It is postulated that he fell prey to expectation bias after hearing that he was "Number 1" in the sequence. There are also speculations that there was a level of missionitis as the Coast Guard plane was taking off to help the Tsunami victims. In short, there seems to be an issue with fundamentals. If there was indeed a miscommunication, why was no one willing to speak up to clarify the instructions?

Third, the runway incursion was actually known. Unfortunately, not by any human. It was a computer system that knew. The runway incursion alert system worked and it gave an alert in the air traffic tower. However, the alert was only a visual indication, with no audio alert. And somehow, no one responded. Therefore, we can see that technology is only useful if they are used by humans properly.

Fourth, there were other potential contributory factors. It was discovered that at Haneda airport, they only turn ON their runway entry stop bar lights when visibility is less than 600 metres. Given that visibility was good, it was not turned ON that night. In contrast, at Changi Airport, these runway entry stop bar lights are always turned ON and serve as an additional layer to prevent runway incursions.





The Republic of Singapore Air Force



The RSAF's Safety Culture

I started off with the Haneda incident not because the RSAF safety culture is bad, but to drive home the key message that we must always be learning. As professionals who work in or work with the Air Force, this tragic incident should really jolt us. We never wish for bad things to happen, but when they do, they are the best and most painless way for us to learn. And it is not just HAFI that should be thinking about it. But all of us.

I shared during the workplan speech earlier that it is not the strongest that survives in today's environment, but one that can learn and adapt the fastest. Our Safety Information System is useful and has been effective in disseminating safety incidents. In my conversations with our airmen and women, many are aware and do learn from internal incidents. But when I asked about external incidents like the Haneda incident, fewer people were aware. My challenge to all of you is to build our muscles to rapidly learn from both internal and relevant external incidents, to strengthen our culture of learning so that we can be safe.

3 Habits to Safely Architect RSAF 2040

Some years back, as HAO, I urged everyone to treat safety like our health - to see our safety auditors just like our doctors and to focus on

prevention rather than cure. I am heartened that in recent years, our auditors have continued to check up on our health. They served as doctors and not just as policemen to ensure that we are mission ready, instead of audit ready. For the good of your health and your safety, I hope all of you will continue to take their advice.

In my workplan speech earlier, I provided a glimpse of the RSAF's next chapter. We are living in a disrupted and uncertain world. It would be difficult to predict, let alone plan for everything. We must therefore strengthen operational resilience, focus on what it means to be strategic, imbue operational agility and strengthen our foundations.

I highlighted our unrelenting focus on safety and that we must continue to achieve zero accidents. Strong individual and team fundamentals are key. Only when our fundamentals - our type competencies and domestics - are strong, are we able to keep our people safe. Strong fundamentals also provide the foundation for us to do the more exciting things like pushing boundaries, developing task competencies and inducting new capabilities like our helicopters, F-35s, UAVs and smart air bases.

I will offer all of you the same three practical habits that I shared years ago. I would like you to internalise them so that we will always have a RSAF that achieves *mission success, safety always and people at heart*.



Habit 1: Be Curious

The first habit is to **Be Curious**. Here, I am referring to the hunger to be inquisitive and to clarify. To know more than just the “what” during operations, but to understand the “why” and the “what-ifs”. I believe that such curiosity will spur us to find out more, hone our instincts to be vigilant, and build up our confidence to speak up when we see something that does not look right.

3SG Hoi Tin Kit is an NSF at Paya Lebar Air Base. Earlier this month, he had a routine day when he was working with contractors to repair the airfield lighting on the runway. While their vehicle was still on the runway, the ATC controller gave landing clearance to an aircraft. Fortunately, 3SG Hoi was attentive enough to hear the ATC broadcast. He was then curious enough to ask why there was such a broadcast and he was confident enough to speak up and query it. Because of that,

the holes of the Swiss cheese did not align. His curiosity saved Paya Lebar from having an accident similar to the one at Haneda airport.

It is incidents like this that make me believe that if our people were more curious and asked more questions, we could have prevented some of the incidents that happened in the RSAF last year. Just think back to whether we could have averted the close proximity between our F-16 and Fokker-50 if we were curious to use our radar on departure, or confident enough to speak up when we realised something was wrong.

We will therefore work towards an environment to encourage people to be curious and to speak up. We must have a culture of psychological safety where the most junior person is comfortable to speak up. The old saying is that curiosity killed the cat. For us, I believe that curiosity saves lives.



Habit 2: Be Critical

The second habit is to **Be Critical**. Be Critical with ourselves and with each other, never be complacent. But always insisting on high standards and pushing ourselves and our team-mates to be even better. As the saying goes, "As iron sharpens iron, so one person sharpens another". We must continue to sharpen each other and build team excellence through constructive criticism.

If anybody needs convincing, ask them to talk to CPT Kenny Goh from Tengah Tower, or LTA Ameerhan Bin Amran and CPT Edwin Khoo who can share their experience onboard their F-16 last month. When Ameer and Edwin's F-16 had a blown tire on takeoff, Kenny was on duty in the tower and spotted something falling from the F-16. He didn't ignore it or sweep it away, but alerted the aircrew. His keen eye, vigilance and strong fundamentals

prevented a bad situation where the aircrew only discovered the blown tire during landing.

LTA Ameer and CPT Edwin on the other hand, had the challenging task of flying an approach end cable arrestment with a blown tire. This is a rare contingency in an aircrew's career. But it was the years of training to high standards, being critical with themselves, that helped Ameer and Edwin on that eventful day. They and the team of controllers, executive officers, and ground crew did well. All exemplified strong fundamentals, high standards and team excellence. Kudos to them.

Habit 3: Create Capacity

The third habit is to **Create Capacity**. We have seen the organisational climate survey results and we know that we will need to address the workload issue. We will therefore invest more in our Reduction movement.



At the HQ RSAF level, we will manage the taskings and tempo for the operational units. At the same time, I would also like some ground-up feedback on areas that we can reduce and create capacity. During my recent visits, I have always asked: “are there things of low value that we could stop doing, so that we can focus on what’s important”? I encourage everyone to identify areas that are no longer relevant, are redundant or should be reviewed. The outcome we want to achieve is to Create Capacity at all levels so that we can focus on **strengthening fundamentals**.

Some Commands have already taken strides to innovate and find solutions. Let me share an example. I’m sure many of us here can remember the many man-hours drained when escorting contractors at our air bases and camps. Those endless hours did not excite anyone. APGC heard this, and in response, they will be introducing an E-Escort system to reduce escort duties. This E-Escort system will provide real-time tracking of contractors and will alert our troopers if contractors go beyond the geo-fenced area. This is an example of the Reduction Movement. And I hope that

we can find more meaningful areas to create capacity for our people. But let me also be clear, the reduction movement is not an excuse to cut down on things which are professionally and operationally important, for example, ops briefs, safety debriefs and so on. I’m sure I can trust your judgement.

Conclusion

To conclude, I would like to reiterate that I still believe in our vision that zero accident is achievable. I want to commend the Air Force, all of you, for having achieved mission success with zero accidents last year. But there were a few close calls. We know we cannot be complacent. Let’s all commit to focus on fundamentals and ensuring high standards. Have a culture of learning and practice the habits of being **curious**, **critical** and **creating capacity**. All of us have a role to play to prevent an accident from ever happening in the Air Force so that we can all go back safely to our families.

I wish everyone a safe year ahead. Thank you and Above All!

Head Air Force Inspectorate's Speech



COL Nick Wong Wai Him
Head Air Force
Inspectorate

Introduction

Good afternoon, CAF, FCC members, Defence Partners both local and overseas, distinguished guests, ladies and gentlemen. Welcome to the RSAF Annual Safety Conference 2024.

Safety Performance

Let me start off with this year's safety performance. We have met all our safety targets. Since COVID-19, our overall FAIR and GAIR numbers have stabilised when compared across the last three years. Likewise, our Human Factors (HF) numbers have remained constant.

Cycle of Accidents in the RSAF

Last year, I spoke about the cycle of accidents within the RSAF. I highlighted that we saw an accident happen between every five to seven years when we looked back in our past 30 years history. Today, we are in our eighth accident-free year. Most of you would know that we had a few close shaves last year that almost reset this counter.



Significant HF Trends and Incidents

I want to remind us of the unforgiving nature of aviation. CAF had started his keynote address by sharing about the Haneda airport accident. Five lives were lost with the Japan Airlines and Japanese Coast Guard aircraft accident. This is a grim reminder of what could happen if we take safety for granted. While investigations are still ongoing and more findings will be shared later on, we know for sure that it was due to Air Traffic related HF errors. Just like what I have said earlier, we still need to improve and reduce our own Air Traffic related HF errors as we will not be spared from such mistakes. Let me highlight two Air Traffic related incidents of our own.

In January this year, at Tengah Air Base, we had a contractor who lost his way, failed to follow signs, and strayed into an active airfield. We had an aircraft on finals and thankfully, our controller was vigilant to spot the vehicle on the runway, and quickly took immediate actions to direct the aircraft to go around, averting the potential worst outcome.

In August last year, we also had a close proximity incident between our Fokker 50 and F-16s which was picked up by our controllers who realised that something was wrong and spoke up. Immediately, action was taken and we were glad that no lives and aircraft were lost.

We should also remember the lessons learnt from the F-16 that aquaplaned on the runway after landing. It was

bad weather, and the captain of the aircraft made the decision to continue with the landing. That was not the wisest thing to do. So this is again, why we need to understand the directives and SOPs and practise sound airmanship, so that we can make the correct decisions, and not put ourselves in a difficult situation.

For logistics, we also saw our own fair share of incidents. But before that, we learnt of a few high-profile aviation safety cases involving one of the largest aircraft manufacturers, Boeing. You would remember earlier this year; they had a door that was blown out in flight. The initial findings suggest that there could be a manufacturing quality control issue.

There was another recent case where an external panel was also found missing after flight. It was fortunate that no lives were lost from these two incidents. But this tells us again, as engineers, we must always demand the highest standards and deliver quality in our work because we need the aircraft to be airworthy, to be safe, before we take it to the skies.

We too have seen lessons, both from the Air Force and from our Defence partners. In 1 AELG, we found traces of aluminium tapes that were left behind and we also saw tools being left behind on aircraft. Upkeeping maintenance fundamentals are absolutely necessary in maintaining high quality and standards. Which is why we need to ensure that we do our jobs right the first time, every time, all the time, and make sure that people around us speak up when they see something is wrong.

Documenting Best Practices and Lessons Learnt

We also had an incident where we found screws missing on a panel of our F-15, and we were fortunate that it did not result in a Things Falling Off Aircraft (TFOA) incident. This incident reminds us that we need to pay attention - sometimes when an aircraft goes through maintenance, it goes through multiple hands. When we do a shakedown and acceptance of aircraft, we must be sure that they are done thoroughly. At this point, let me ask our Command Chiefs. Do you remember we used to have best practices that we follow, such as hanging the loose screws in a bag to make it visible? Or in the past cases, if we have a missile launcher where the umbilical cord is removed, don't we hang out the streamers or leave the launcher cover open so that these serve as visual cues for everyone? Do you realise that over time, these practices are lost? I think it is time for us to reconsider these best practices and bringing them back.

Good Shows by our People

Since recovering from COVID-19, we have steadily increased our tempo back to pre-COVID levels. This has been a very busy year, with the RSAF conducting operations and training round the clock, locally and overseas. Despite the incidents I shared earlier, I do not think that we are in a bad shape, especially given our pace and tempo this year. We just need to ensure that we learn from our mistakes and strengthen our systems to prevent such incidents. Let me explain. I have seen many more positive examples where more potentially catastrophic incidents were averted because our people demonstrated strong fundamentals, worked well together as a team, and eventually saved the day.

We start off with the Heron 1 which experienced emergencies in the recent Exercise Forging Sabre. Some of these emergencies were new. As a team, the crew displayed team excellence as they had to think outside the box, and worked through many hours together to develop a new solution to bring the aircraft back down safely to land.

For our fighters, we saw two high mishap potential incidents. First, was a bird strike causing damage to the engine compressor. With strong fundamentals, and ultimately working as a team with CAAS and RSAF controllers, they managed to bring the aircraft back safely despite flying with reduced power on a damaged engine.

Recently, we had an F-16 with a blown left tyre shortly after take-off. The tower controller quickly informed the pilot when he realised that the tyre had burst and dropped off the aircraft. With strong fundamentals, the junior pilot, together with the weapon systems officer, managed to land the aircraft safely. At this point, I want to highlight that this is a unique incident. In my 25 years of flying, we have trained diligently for such emergencies, but I never once heard of anybody in our Air Force that had to execute it in real life. This tells us the importance of our training and that we should take it seriously because even though such a scenario may be remote, its consequences are highly catastrophic.

In this incident, the first person to stop the chain of events was the controller. He spoke up when he looked up and he saw something drop off from the aircraft. That was the most important. By speaking up, he alerted everyone to take a look and they found that the aircraft's left tyre had come off. The squadron worked together as a team to manage the situation on the ground.

In flight, the flight supervisor supported the incident aircraft while working with the Squadron Executive Officer and 5 AELG to come up with a sound game plan to recover the aircraft. Did you know that the incident pilot was a very junior CAT D? It was good that he tried to land on the first attempt but was not comfortable with it, and went around. On the second attempt, he landed the aircraft safely. Well done to the entire team for recovering the aircraft.

Not many people would know that I happened to be at 145 SQN conducting the audit out-brief when this incident happened. I am very proud of what I saw as Team Excellence when everyone in the squadron and 5 AELG came together to work through this emergency.

Safety Culture

I think the Air Force is still in a strong position. Yes, we have made mistakes but we are not in a bad shape. Why is this so? The simple reason is that our safety culture remains strong. Our open reporting culture has been very healthy. In fact, open reporting has been increasing year on year and I thank all of you for believing in us. I believe all of us have been sharing about just culture and I want to remind us about what just culture is. Just culture is not a blame-free culture, neither is it a punitive culture. It is about being fair so that our people have psychological safety and are able to do their work well, trusting our system when they make genuine mistakes.

I would like to remind ourselves of a few cases. Last year, there was a driver in Tekong who was speeding and met with an accident. The consequences could have been much more dire if not for the safety barrier. This negligence became the backdrop for sharing our Lest We Forget incidents during our CAF Quarterly Safety Forum.

Yet, after the sharing, we had another incident barely six months after where our Ops Utility Vehicle was caught speeding by our military police. Such blatant violation is again unacceptable.

Did we not learn from our past incidents where the drivers got themselves into accidents because of speeding?



We must remember that we are not just responsible for ourselves. Our actions can have consequences to other people as well. Remember why we must follow the rules in the first place, and be professional and disciplined about it.

What our COs are Saying

This brings me now to a different topic. As AFI, we aim to support you in your journey by making your unit better and creating more capacity for you so that you can focus on your operations, and push towards higher standards in your training. Hence, we have changed the way we are doing audits.

We thank you all for the positive feedback. While we are encouraged, I must admit that we have been swamped by units asking us earnestly how they can improve, and I just want to thank all of you. I really appreciate the opportunity to share best practices with you, and also take your best practices to share with everyone else.

We have tried to do more to make sure that we all learn not just to improve your units but also help people to do better in the way that they internalise safety. Commands are doing more of the Lest We Forget series to strengthen our institutional memory, and we have recorded videos of our Safety forums, made them available to overseas units who have never had the chance to get the direct exposure. This allows them to keep in touch with our learning even though they are away for two to three years. To continue creating capacity for all of you and to strengthen your systems, we will continue to work hard for all of you as part of the Unit Performance Enhancement Working Group, and keep sharing best practices across our units.

Workplace Safety and Health

For our workplace safety and health, I want to spend a bit of effort here to share some points.

First, our philosophy is that one injury is one too many. Our minor injury rates have started to drop since WY22. The reason was this.

We implemented some measures that may not have been very popular at the start – such as mandatory wearing of helmets when performing operational tasks, but they are necessary to ensure our personnel's safety.

When I visited Oakey Detachment for the first time two years ago, I saw how Boeing Defence Australia used these hard hats and fall arrestor systems, and they have been using it for years. They were quite ahead of us in some of the safety measures in maintenance tasks, and we decided to follow suit. As a result, with bump caps and hard hats, we have reduced the number of these cuts and bumps. While I know that there are some challenges on the ground, I believe over time, if taken in the right spirit, it is necessary for us to protect you and our future generation of servicemen, so that they can focus on what is important so that they can do their jobs well.

In fact, I am happy to see that Commands are learning the best practices from each other such as using these maintenance platforms for aircraft servicing and translating to our other ground operations.

When we look at our overall workforce in terms of health, we also look at our exposure to loud noises and have noted that this is an area that we need to improve on. We thank Air Force Medical Service in making sure that our people are always protected in giving them the best form of protection to do their jobs well.

As I recap, I think our Air Force has strong fundamentals and a strong safety culture. I am very proud that I've seen how people have taken safety initiatives and safety ownership on the ground to make sure that they can improve the lives of people to improve their workplace. And more importantly, so that the people can concentrate on what is important for their jobs.

Safety Ownership

Case in point, 145 SQN. They worked closely together with AFI for a plan to put their exercises and taskings into data, and then output them as a traffic light visualisation. Now with this tool, I think Fighter Group will be better informed to watch out for demanding periods. Moving forward, I hope this can be shared across the rest of the groups. And for all the units to ponder upon: how you can adopt something similar to at least understand how risks can be identified and managed well at the system level.

Our people have done things that have saved man-hours as well. Remember the POL pop-up tentage from 160 SQN, the effort on enhancing spatial awareness by 507 SQN, and the use of IVC footages to design just-in-time training by the Exercise Wallaby Safety Team so that we can learn the correct lessons.

Our people have no lack of effort when it comes to safety, to help us improve our working environment, to improve training, uphold standards and make sure that they continue to push safety on the ground. And I thank all Commands for the effort.

Key Areas of Focus for WY24/25

For the final part of my speech, I would like to just highlight a few areas that we should watch out for the next work year.

The safety theme for this new work year is, **“Strengthening Fundamentals through Team Excellence”**. Our air force capability is built upon generations and generations. We will always have new airmen and women who will join us and start from a new baseline. Our job is to make sure that we continue to drive high standards, push them hard, and give them realistic training. We need to continue to shape our people’s attitudes and mindsets, beliefs, behaviours, habit patterns, towards excellence and to do it right the first time. We need to give them the space and the capacity so that they can focus to train well and do their jobs well. Next, within ourselves, I ask that we continue to strive to strengthen our safety culture so that our people feel psychologically safe to speak up, to be able to correct each other and not be afraid, especially when we need them to. Together, we will be able to achieve team excellence.



As encouragement, let us continue to put in our efforts, chart out our plans properly, identify the areas that we need to pay attention to, and identify the groups of higher risk people you have. There is a time to push and there is a time to consolidate, and make sure that we give our people the space to be able to train properly and be grounded in strong fundamentals. You will need to build these skill sets as we continue to develop and be ready for the future.

With that, I have come to the end and I wish everyone *mission success, safety always, people at heart*, for the work year ahead. Above all.



Head Air Engineering and Logistics' Speech



ME8 Timothy Yap
Head Air Engineering
& Logistics

Good afternoon CAF, members of FCC, distinguished guests, ladies and gentlemen.

Accident Free Year


This work year, the RSAF, together with our partners, have generated and flown more than 60,000 flying hours locally and abroad – with zero accidents. I would like to take this opportunity to acknowledge the collective effort of all engineers, maintainers and logisticians in making this happen. Having said that, it is still important for us to see what safety lessons the year had for us.

Review of Logistics Safety and Quality Indicators

Let me start by reviewing our Safety and Quality indicators. In general, I would say that the RSAF indicators suggest that we are on the right track. While the RSAF HF (Logs) rate has stayed relatively stable, the injury rates have fallen by 55% in WY 23. The Quality Non-Conformance rate has also continued to decline – reducing by 30% in WY23. Put together, these metrics suggest that the overall logs safety health state is improving.

While our health indicators are improving, there are signs and symptoms that suggest that complacency could be setting in. Let me touch on two incidents that could be symptomatic of a deeper malady if we do not treat them adequately.





The first occurred just recently, on the 23rd of January. A serviceman was performing Post-Flight Inspections, when he noticed there were screws missing from a panel on the undercarriage of an F-15SG aircraft which had flown some sorties previously. We were lucky that it did not result in a Things Falling Off Aircraft (TFOA) incident. We certainly should have done better as there were many opportunities for this error to have been trapped at the various levels – individual, team and unit.

The second case, a Foreign Object Debris (FOD) incident, occurred last year, on the 13th of June in 1 AELG. Serviceman A took a tool from the tools store but failed to book it out and also did not document it in the Loose Item and Accountability Record. Serviceman A subsequently handed this over to Serviceman B, and B did not challenge A, even though he knew that A had taken this shortcut. Thus, when Serviceman B carelessly left the tool on the aircraft, there was no check and balance to help him uncover his lapse. Once again, we were fortunate that the loose tool was discovered during the pre-flight check, thus averting any potential damage to aircraft. Similar to the first case, there are lessons at the individual, team and unit level that we must take away so as to prevent the next accident. First, we should never take shortcuts simply for the sake of convenience. Our SOPs are designed to protect us. Second, we must have the courage to speak up when we see something that is not right. And if we are on the receiving end of such comments, we must be humble enough to acknowledge it and self-correct. Third, there should be a unit culture where we openly talk about such behaviours and encourage the practice of it.

Given incidents like these, this year's safety theme of Strengthening Fundamentals through Team Excellence, is timely and relevant. Over the course of this year, we should be thinking about how we can strengthen our teams and team dynamics, so that it enhances safety and increases our resilience against individual errors and lapses.

Strengthening Fundamentals through Team Excellence

So let me share with you what I think it would look like when implemented in our units. In truth, it wouldn't look very different from what we have been doing over the past year. After all, I started out by saying that our indicators suggest that we are on the right path. So, surely this would not be the right time to change paths. Instead, what I would suggest would be to make minor course adjustments to account for what we are seeing and the changes that are happening.

Let me return to the framework that I have been using over the last few years. To refresh everyone, it is to **Check, Assess** and **Follow through**. Over time, this will become **Entrenched** as part of a strong safety culture. I think that we have been doing this well over the last year and so I thought it would be useful for me to share with you good examples of its practice, so that you can see what could be relevant for adoption in your own units.

C.A.F.E. Framework - Check

The first part of this framework is Check – and this is where I think some tweaks would be helpful. Instead of just checking to ensure that we are ready for the task, I would like our individuals and teams to do a more thorough Appreciation Of Situation (AOS) instead.

I have intentionally borrowed a process from military planning because indeed, when we carry out our tasks, we must not just be ready for what we have trained for, but also be prepared for contingencies that can happen. We must also understand the strengths and weaknesses of our team members and most importantly, if we identify any area that we are not fully comfortable about, we must have the courage to sound out and raise it for everyone's awareness and if necessary, discuss ways to mitigate the issue.

Let me return to the two cases that I was sharing just now. If a thorough AOS had been done, the individual in the first case would have been prepared with a screw bag to contain all the screws, thereby providing a strong visual cue that the task was still incomplete. And in the second case, Serviceman B would have appreciated the risks of tools not being properly booked out and sounded out his discomfort, thereby breaking the unsafe chain of events.

On the positive side, let me give you a positive example of how this practice was demonstrated. On the 11th of April last year, ME1 Arameus Sit, was preparing to carry out a task. He allocated a No-Disturb-Time for himself prior to commencing and meticulously reviewed the servicing task via the IETM before starting his work. It was during this review that he noticed a discrepancy: a wiper ring that he had been issued for the task was made of stainless steel, instead of synthetic rubber as specified in the manual. Although he was unsure if the issued wiper ring could be a usable alternative, Arameus chose to report this to his superior. This act of sounding out, prevented the installation of an incorrect component and averted a safety risk. His meticulous preparation and proactive approach is exemplary of how we should Situate ourselves in preparation for a task.

C.A.F.E. Framework - Assess

The second part of the framework is Assess. It is about being alert and continuously assessing for hazards and anomalies. Thus, it requires us to be focused on the task, but at the same time paying attention to the surroundings and being alert to discrepancies.

I will share with you two examples of how the vigilance of our people has made a difference. The first occurred on the 22nd of May last year. 3SG Ryan Soh, a Flight Line Crew (FLC) from 806 SQN, was engaged in a routine After Flight (AF) Servicing. During the task, he noticed a subtle anomaly near the Nose Gear Box (NGB) inlet - a faint shadow that suggested the possibility of FOD. Trusting his assessment, he inspected the NGB, which is out of the AF Scope, and discovered remains of a bird carcass. With this finding, a more thorough assessment of the engine could be done to preclude damage to the engine. This example of vigilance, from an NSF no less, is certainly reassuring. And will hopefully serve as an example for others.

Next, I will highlight the example of ME3 Chia Cheow Meng. During an AH-64 engine preservation task, he noticed fuel seepage from a disconnected fuel supply line that was blanked off by an OEM-provided plastic blanking cap. Instead of simply replacing the cap to solve the problem, ME3 Chia assessed that he could do better. He went one step further, to eliminate this hazard more permanently. Working with other experts from 816 SQN, he developed a new cap made from aluminium. This allowed for a more secure as well as a more lasting blanking solution. Well done to ME3 Chia. In fact, besides being vigilant in his inspection task, he also embodied the next aspect of the framework which is "Follow Through".

C.A.F.E. Framework - Follow Through

In its simplest form, Follow Through is about completing our tasks well. To do this, we need to make sure that all loose ends are closed off.



However, this is just follow through with a C grade. ME3 Chia could have just closed off his task by replacing the blanking cap with a new one. However, he chose to deal with the issue in a more fundamental and enduring way. He took ownership to ensure that we have the safest possible AH-64D aircraft in the world. In the next few examples, keep this question in mind: "Could the individual have simply walked away? And if you found yourself in their position, would you have done the same?"

First we have ME3 Yap Guo Yang. Despite the engine meeting operational limits after a test cell run, ME3 Yap noticed an irregularity: 4 visible threads on the clevises, doubling the usual 1-2. Opting for thoroughness over convenience, he followed through with a detailed rigging check. His diligence unveiled misalignment in the rod end clevises and bell crank arm, a discrepancy later confirmed by STEA to be a result of improper rigging. ME3 Yap's proactive approach not only prevented potential declines in engine efficiency, but also safeguarded against diminished stall protection.

The next example comes from ME1 Shia Li Yang from 807 SQN. Upon completion of a gun removal from F-15SG, Li Yang was stowing the utility crane when he noticed a subtle looseness during rotation of the winch assembly. Prioritising safety, Li Yang called for the assistance of his team to support the winch. After completing the task, Li Yang sought a thorough examination at the GSE workshop, which revealed a

broken friction disc within the winch assembly. His mindfulness during the task allowed him to detect slight anomalies, and proactive follow through for additional inspection exemplified a commitment to closing the safety loop, preventing potential mishaps by following up on something he was uncomfortable with.

C.A.F.E. Framework - Entrench

The last ingredient in this framework is Entrench. The first three pieces will grant us a strong fundamental, but this last ingredient will allow it to be rooted and strengthened over time. What does this mean at the level? It means that we need to start making safety practices second nature. Let us take the example of driving a car. Drivers among us will know that the first action one would take when getting into the car is to fasten your seatbelt. It is almost instinctive. What do you do when you reach the side of the road? Looking to the right, left and right again is automatic. How about when we take a tool out of a tool store? Is booking it out instinctive? When we operate an overhead hoist, is wearing our head protection automatic? I hope that our safety leaders will set the example in following these practices and also in enforcing them all the time. If we see one of our colleagues executing a Deliberate Action Programme (DAP) task without following the point and call protocol would we point it out to him? I will now share two examples of individuals and units who have gone the extra mile to entrench safe work practices.



The first example I would like to bring up is from the Platform Operability Squadron, 506 SQN. 506 SQN formulated a structured process in entrenching mindfulness practice into their daily work. Over a course of two years, they had rolled out mindfulness initiatives in phases; phase one to raise awareness and attain acceptance by individuals. This includes refreshing initiatives such as infographics, DAP Action Card, DAP/Mindfulness videos aired during the safety programmes. The second phase attempts to integrate into their daily work, through morning mindfulness routing prior to Start Of Day Briefing, practice of No-Disturb-Time at the team level to situate their tasks ahead. This journey allowed them to build a strong culture in their workplace. I am convinced and am on the same page as them, building a culture will lead to entrenchment and that will go a long way in strengthening their safety fundamentals.

The last story I have today comes from ME4 Kenneth Choo, the Safety Officer from 815 SQN. ME4 Kenneth saw the linkage between entrenching the safety culture in his unit to the APEX initiative of putting “People at Heart” in his squadron. By empowering individuals in Safety meetings to discuss their upcoming high risk activities and focus, Kenneth has fostered a proactive safety environment driven by ownership. His innovative “Make Safety Fun” Carnival in 2023 transformed safety engagement through gamification, making learning and compliance engaging yet enjoyable. This approach had not only achieved a 100% transition of BBS submission through SafeGuardian, but the overall submissions had increased as well. Let us embrace such creative strategies to inspire an entrenched spirit of safety amongst our teams.

Conclusion

These positive examples that I have shared today where our people have *Situated* precisely, *Assessed* vigilantly, *Followed through* proactively and *Entrenched* consistently, are encouraging signs. However, I have also shared with you worrisome cases that could be indicators that some of our best practices are eroding, and people are falling prey to shortcuts and complacency. In aviation, shortcuts are deadly. It could cut short your life or your colleagues’. *I am sure that some of you would have noticed that the framework I have used now spells SAFE.* I think this is a good name – and I am sure that if you follow it religiously, it will help to keep you, your team and your unit safe over the course of the coming work year.

Thank you and wishing you a *SAFE* work year ahead.



Head Air Operations' Speech



BG Teo Soo Yeow
Head Air Operations

Introduction

Chief of Air Force, FCC members, our Defence Partners, distinguished guests, fellow airmen and women, a very good afternoon.

The start of a new work year is when we chart out our priorities for the coming year. But it is also equally important to look back to identify trends and areas we need to do better. And for today's context, safety. As I reflected on operational safety in the RSAF the past year, it sure felt like a roller coaster ride. We started the year strong. In May, we witnessed a textbook response to a sick engine following a bird-strike. One of our F-16s encountered a flock of birds when it took-off from Paya Lebar Air Base, and after observing that the aircraft was unable to climb and accelerate, the pilot manoeuvred the aircraft away from populace and immediately executed an emergency landing in Changi Airport. All this happened within four minutes from take-off to landing. Strong pat on the back for the aircrew and controller, deserving of the CAF safety award.

Unfortunately, we also had our downs when a F-16 aquaplaned on the runway after landing in marginal weather conditions. This was coupled with a few ATC and close proximity incidents that happened last work year as well.

If you can recall, we had our RSAF55 parade on 1 Sep 2023. One week later, we celebrated RSAF55 Family Day, before the RSAF55 Open House that was opened to the public two days later. A joyous event, a milestone that I believe everyone felt proud to have contributed towards in one way or another. Now take a



pause and imagine if we had a safety incident which resulted in fatalities, days before this event. What would our RSAF 55 have looked like? Even at this very moment right now, the mood would have been completely different. Clearly, we cannot leave safe outcomes to chance. We need to engineer safe outcomes.

Is ensuring safety a science or an art? My personal take: the study of safety is a science, but the application of safety is an art. An art in exercising leadership to shape attitudes and perspectives; Change of habits and taking ownership of outcomes. That's where the roles of Commanders, Supervisors and Leaders on the ground come in. We need each one of you, regardless of seniority or rank to play this role. Your actions or the lack thereof speaks volumes and influences those under your charge more than you think.

Areas to Fix

For the record, the RSAF is NOT intolerant of errors. We accept that mistakes will be made. It is only human. Using myself as an example, I veered off the runway in an A4 Skyhawk back in 2003. Root cause: poor brake application technique resulting in aquaplaning. I returned to flying five days after the incident. What did I learn from it? Respect for wet runway. This lesson followed me for life even when I started operating on aircraft with anti-skid protection. It also shaped my safety attitude as a military aviator in several aspects. Today, I would like to share with you my mantra towards flying safety and my own coping mechanisms. Just five points.

We often critique ourselves following an incident. One of the lessons that commonly emerges is the need to be constantly vigilant. Well, in theory yes. But in practice, I am not sure if one can always be sitting at the edge of your seat. At least for me, I cannot claim that I always have my "A" game on. Therefore, (1) I rely on habit patterns to make sure I do not omit critical steps and (2) I follow my instincts to sense when I need to migrate towards to the edge of the seat.

Habit Patterns

Firstly, on habit patterns, each vocation will have unique practices. For pilots, habit patterns for pre and post take-off checks, checking landing clearance, 3-greens and runway clear before landing, verbalising clearances both intra and inter-cockpit. These are examples of habit patterns that ensure critical steps are not omitted and we must not fall prey to paying lip-service or we will be sorry for doing that one day. For AFEs, it may be shisha kanko. Whatever works. Find your own mojo. Secondly, on instincts, we need to figure out how to sense something is amiss and appreciate the feeling of "hair standing". For example, wingman missing calls and checks, ATC controller being slow to respond etc. These tell-tale signs should trigger a second take for self-preservation. Could the above have prevented our recent near misses? I would think so. Healthy habit patterns would have helped arrest those situations.

Know the Limits and Recognise Your Boundary Conditions

I will always try to identify and prioritise what is the most important boundary to avoid at different phases of flight. If I am



flying low, avoiding the ground is my priority. If I am joining up, arresting a high closure rate becomes my priority. Referencing the case where the F-16 aquaplaned on the runway, if you are landing on a wet runway, the boundary condition must be the touchdown point and airspeed. If we can develop the safety instincts of our team members to identify, recognise and respect these boundary conditions at different phases of flight, they will be able to focus on the right areas at the right time. Had the incident pilot of the F-16 recognised that he was going to touchdown past 2,000ft into the wet runway, he would have gone around and saved the day.

Set Aside Ego, Exercise “Trust But Verify”

“Trust but Verify” is more understood than is practiced. Hind-sight is 20/20 and we all agree that there must not be any doubt in the cockpit. But time and time again, the reluctance to verify results in unsafe outcomes. Many a time, it is the ego and some professional courtesy that is in the way. Set that aside! If the wingman for the F-16 involved in the closed proximity flight with the F-50 had verified with the ATC on the altitude block they were cleared to, we would not be discussing this incident today. Fighter aircrew are especially prone because we take pride in clear and concise communications, especially during a

mission. I do not disagree. But clearly, this desire cannot be the reason for not seeking clarification when you have doubts!

Stop Re-Learning Mistakes



We emphasise open reporting so that we can learn from others’ mistakes and not to pay for them ourselves. Last year, we had a few ATC violations of similar nature within a short span of time. All related to wrong steer-point selection. CAF just spoke about the collision between Japan Air Lines and the Japan Coast Guard at Haneda airport in early January this year. The distressing images are still vivid in our minds. How did we allow a similar situation to develop in Paya Lebar Air Base less than two months after the Haneda incident? We were fortunate. We need to avoid reading about these lessons as though they are multiple degrees of separation from us. The odds of a similar incident happening to us are real. We need to recognise that and take deliberate preventive actions to the extent possible.

Speak Up; Flying is a Team Sport

Professional courtesy and the tendency to defer to seniors and superiors discourages individuals from speaking up. If you recall the 1994 Super Puma crash that was shared in the last CAF Quarterly Safety Forum, we lost four aircrew because of a series of poor decisions; (1) pressing on with the mission



without proper briefing, (2) insufficient crew rest and (3) descending below the minimum altitude. While missionitis of the pilot flying was deemed to be the root cause, there were many opportunities when someone in the team could have intervened and spoken up. Doesn't matter if it was the CO. If someone had said something, the four aircrew could still be with us today.

More recently, a formation of two F-15s was cleared by ATC to fly an unfamiliar recovery profile. Four aircrew had doubts but no one sounded out. Eventually, there was a potential conflict which had to be resolved by the air traffic controller. Cultivating a speak-up culture is an area that we still have much room for improvement. We should do better.

Those were the tools I used to cope as a pilot and also as a CO. I found them useful to help the squadron focus because they were more tangible than abstract. Even as RSAF 2040 requires us to fulfill new mission sets, these mantras will endure to help strengthen our foundation to answer future demands safely.

Operational Challenges in the Year Ahead

Looking ahead at the next work year, we will need everyone to step up. We have a very full calendar ahead, beyond the slew of exercises we have. Commanders - you understand the psyche of your teams best and we are counting on you to influence your team, to take ownership in delivering safe outcomes.

Notwithstanding the few close shaves I have shared, I do want to acknowledge the efforts of each type group to turn things around. I think it is slowly paying dividends and there is evidence that we are beginning to turn the corner. Our recent response to the F-16 blown tyre incident with a successful approach-end arrestment, our successes at Exercise Cope Tiger 24 and our air-drop operations in Gaza gave us good reasons to be optimistic. These are complex emergencies, high-end exercises and unprecedented operations. Despite that, we were able to deliver mission success safely.

Conclusion

To conclude, if I may borrow the golfing lexicon, we must recognise that there is no mulligan in flying. We have one swing and we got to make it count. WY23 resembled a round that had too many bogeys. We encountered a series of hazards and OBs at places we least expected, and we lost our focus at times. But the string of pars in the last few holes do give us some confidence that we are beginning to turn the corner. WY24, will be a fresh start. We will have to maintain focus and exercise good course management. I am confident that we will hit more fairways and greens in this coming year and look forward to more pars and birdies in WY24.

Above all, have a safe work year ahead.



THE RSAF ANNUAL SAFETY CONFERENCE 2024 AWARD WINNERS FOR WY23/24

Accident-Free Flying Years

Unit	Accident-Free Flying Years
121 SQN	51
STANDARDS SQN	48
122 SQN	47
124 SQN	37
149 SQN	37
143 SQN	34
150 SQN	34
AIR GRADING CENTRE	34
140 SQN	32
145 SQN	31
127 SQN	28
142 SQN	27
112 SQN	24
126 SQN	20
PEACE VANGUARD	20
119 SQN	19
130 SQN	18
128 SQN	18
125 SQN DETACHMENT	18
111 SQN	17
116 SQN	17
UAV TRAINING SCHOOL	17
125 SQN	15
123 SQN	14
PEACE CARVIN V	14
120 SQN	13
PEACE CARVIN II	13
OAKLEY DETACHMENT	6

Zero Accident in Motor Transport

Command / Air Base
HQ RSAF (AFMS, 110 SQN and AFSC)

Good Achievement in Motor Transport

Command / Air Base
APGC (PLAB)

Outstanding Unit Safety Officers

Command/Formation	Rank/Name	Unit
ADOC	CPT S Janarthan	203 SQN
ACC	MAJ Tan Yi Zhong Daniel	143 SQN
PC	CPT Choi Jia Neng	18 DA Bn
APGC	ME4 Choo Chen Jiang Kenneth	815 SQN
UC	MAJ Andrew Ong	116 SQN
AFTC	CPT Lee Ping Liang	150 SQN
HQ RSAF	ME5 Tan Chong Yan	HQ AFSC
AWC	CPT Lim Yang'en Javier	TEC

Outstanding Unit Safety Warriors

Command	Rank/Name	Unit
ADOC	ME2 Choo Liang Quan	C4 Hub, AOCG
ACC	ME3 Ho Teng Yee	142 SQN
PC	ME3 Sivashankar	123 SQN
APGC	SSG Choo Yue Xun Kerby	708 SQN
UC	ME2 Hong Bee Ling Catherine	811 SQN
AFTC	ME3 Ng Jia Wayne Lennon	AOSX Sch, AWTI
HQ RSAF	ME3 Goh Wee Siong Nelson	HQ AFSC
AWC	ME2 Gian Ping Hwee	110 SQN

RSAF Safety Poster Design Competition 2023 Top 5 Winners



1st Place:
LTA Tedrick Fong Zheng



2nd Place:
ME4A Javier Lim Yong Han



3rd Place:
ME1 Tan Jun Heng



4th Place:
3SG(NS) Gordon Goh



5th Place:
CPT Tan Kai Wei Alston

The New RSAF Safety Logo

In WY23, AFI reviewed the RSAF safety logo and tagline to reflect our pursuit to achieve Mission Success, Safety Always and to include the continued commitment that our people are placed at the core of what we do. The logo and tagline was presented at the RSAF Annual Safety Conference 2024.

The following below is the rationalisation of the new RSAF safety logo and tagline:



The four accelerating aircraft are stylised to demonstrate the dynamism and strength in the RSAF's continued quest to achieve Zero Accident in all our operations individually and as a system.

The four trails of the climbing aircraft symbolise the Air Force's role in each of the Services and its participation in Joint operations. The four aircraft also depict our continuous commitment to the Safety principles.

Blue is the corporate colour of the Air Force and is used to reinforce the professionalism and capabilities of the RSAF. Green is the colour of safety, and is also a positive colour that portrays life and growth, giving direction and vision to the RSAF's safety effort. Silver is used as it reflects the modern, innovative, and future-ready safety culture we seek to nurture, while highlighting our enduring commitment that our people are placed at the core of what we do.

The tagline is "**Mission Success, Safety Always, People at Heart**". This reflects the philosophy the RSAF adopts towards safety where emphasis is given to safety and operational success, with our people at the core. An italic font with 3D treatment on "**SAFETY**" is chosen to give it a more streamlined and futuristic look.

Outstanding Safety Award



From left to right: 3WO Lim, Comd ACC BG Lim Kok Hong and MSG Ang

On 17 Jul 2023, 3WO Sammuir Lim Jin Hong and MSG Ivan Ang Jun Rong from 121 SQN were onboard a F50 aircraft which was conducting a training flight in the South China Seas. While 3WO Lim was verifying the flare timer knob setting performed by MSG Ang, the flare timer assembly unexpectedly ejected from its housing and struck 3WO Lim on his right hand. The parachute of the flare then deployed partially, and illumination was observed within the flare housing.

3WO Lim and MSG Ang took immediate action to bundle up the partially deployed parachute and jettisoned it out of the aircraft through the universal chute. A “knock it off” was called, and the aircraft returned to base after ascertaining that there was no impact to flight safety.

As there was no established procedure to deal with such a scenario, 3WO Lim and MSG Ang relied on their strong fundamentals and safety instincts to decisively handle the malfunction. This prevented the flare from fully igniting, which could have resulted in a fire within the cabin. For their vigilance and strong safety instincts, 3WO Lim and MSG Ang were awarded the Outstanding Safety Award.



On 18 Oct 2023, CPT Tan Jun Liang from 150 SQN, while airborne, spotted a protruding screw from the top of his aircraft’s port-side wing, a detail that could have easily been overlooked. The immediate actions taken in reporting and addressing the incident demonstrated his profound understanding of the importance of safety protocols. His extraordinary diligence averted what could have potentially resulted in a Things Falling Off Aircraft (TFOA) incident.

His actions were exceptional, allowing other aircraft to land ahead of him and opting to recover via the least populated route to prevent further deterioration of the situation. He promptly recovered with the protruding screw intact and shutdown the aircraft uneventfully. His dedication to ensuring the safety of the populace and equipment is a testament to his unwavering commitment to the RSAF’s mission.

In recognition of his extraordinary contribution to maintaining safety standards and preventing a potential TFOA incident, CPT Tan was awarded the Outstanding Safety Award.



SSG Chen (left) receiving his award from COMD ADOC BG Koh Ee Wen (right)

On 29 Jul 2023, SSG Chen Jian Hong from 163 SQN participated in the National Day Parade (NDP) as a Stretcher Team IC. While stationed in a tunnel below the Padang stands, he noticed that one of the diagonal scaffolding supports for the spectator stands was out of place. Realising it was not connected to the main scaffolding, he promptly informed his superior about the hazard, who immediately reported it to the NDP organising secretariat. A response team was activated to reattach the diagonal support to the scaffolding. Failure to address the issue could have potentially resulted in severe injuries and consequences if the stands collapsed while filled with spectators.

SSG Chen’s actions effectively addressed a safety issue. His sharp safety awareness alerted him to a potential anomaly, and he went beyond his job scope to investigate the issue thoroughly before promptly informing his superior of the hazard. In recognition of his sound safety instincts and a strong sense of safety ownership, SSG Chen was awarded the Outstanding Safety Award.

Outstanding Safety Award



MAJ Pang (left) receiving his award from COMD ADOC BG Koh Ee Wen (right)



CPT Tan (left) receiving his award from COMD ADOC BG Koh Ee Wen (right)

On 10 Oct 2023, two F15SG aircraft departed from PLAB to South China Seas for a training mission. During the departure, the F15SG aircraft were observed to be deviating north towards the Light Aircraft Training Area (LATA) instead of the expected departure profile towards Macritchie. The Departure controller, CPT Tan Yu Xuan Theodore from 203 SQN, showed incredible alertness and was able to spot the deviation immediately just as the aircraft was deviating from its track. With very little reaction time and space before the aircraft entered the LATA airspace, CPT Tan quickly issued a series of ATC instructions to steer the F15SG aircraft away, including expediting the aircraft's climb to steer clear of the light training aircraft that were operating in LATA.

At the same time, another controller, MAJ Pang Hong Jun Melvin who was also from 203 SQN, went beyond his job scope of monitoring his traffic area and showcased high situation awareness in spotting the aircraft deviation. He proactively leveled off a light training aircraft that was climbing in LATA Bravo and Charlie and also restricted another light training aircraft planned for LATA Bravo and LATA Charlie and held them in LATA Alpha only.

Having displayed exemplary situation awareness and sound immediate actions, both CPT Tan and MAJ Pang not only prevented a potential mid-air collision but also effectively safeguarded against any damage between the RSAF and civilian assets. In recognition of their professional conduct, exemplary vigilance and situation awareness, CPT Tan and MAJ Pang were awarded for the Outstanding Safety Award.



3SG Yap (left) receiving his award from COMD ADOC BG Koh Ee Wen (right)

On 28 Sep 2023, 3SG Yap Jay How, Sean from 163 SQN was waiting for the train at Tanah Merah MRT Station when he spotted that a civilian fell to the ground and fainted. 3SG Yap showed strong safety alertness and initiative as he rushed over to the casualty and checked on his responsiveness. 3SG Yap then applied the Man Down Drill and used the Alert, Voice, Pain, Unresponsive (AVPU) scale to ascertain the casualty's consciousness.

3SG Yap realised that the casualty was alert but was drifting in and out of consciousness, repeatedly collapsing on the floor. Immediately, he asked a passerby to call for an ambulance while he and another passerby carried the casualty onto a wheelchair. 3SG Yap then handed the casualty over to the SMRT staff and briefed them on the incident and the casualty's symptoms.

3SG Yap's swift actions and professionalism in handling an emergency surpassed his job scope. His sharp safety awareness and knowledge alerted him to the situation, allowing him to promptly assess the casualty's condition. Utilising the AVPU scale, he determined the need for medical assistance and promptly called for an ambulance. For his exceptional alertness and professionalism, 3SG Yap was awarded the Outstanding Safety Award.

Outstanding Safety Award



COMD APGC BG Amos Yeo (left) presenting the award to ME3 Lim (right)

On 6 Oct 2023, ME3 Lena Lim from 815 SQN spotted one of the three mounting bolts on the Convergent Exhaust Nozzle Control (CENC) of the engine had a missing washer and nut when performing a Quality Verification Inspection (QVI) on the engine output by STEA Engine after depot maintenance. ME3 Lim instinctively called for a timeout and informed her flight management of the issue. They later provided feedback to STEA Engine and requested for an investigation which subsequently uncovered lapses in the final inspections.

ME3 Lim was vigilant in her inspection and was able to pick out this anomaly during the inspection. If the missing washer and nut remained undetected and the engine had been released for flight, the bolt could have backed off from the CENC mounting bracket during flight, causing the CENC to dislodge. The dislodged CENC could have potentially led to an engine augmentation blow-out in flight if the engine throttle was pushed into an afterburner regime.

ME3 Lim's vigilance in detecting this anomaly during inspection allowed the team to uncover the improper installation of the CENC. This incident serves as a positive example for our personnel, highlighting the importance of being vigilant and paying attention to detail in our daily tasks. For her diligence and meticulous actions, ME3 Lim was awarded the Outstanding Safety Award.



COMD APGC BG Amos Yeo (left) presenting the award to ME3 Ang (right)

On 24 Mar 2023, ME3 Ang Kay Kok Wayne from 815 SQN was the Base Duty Officer when he was activated by the Base Command Post to assess a situation at the Tengah Air Base (TAB) pass office. It was reported that an accident had occurred where a taxi had veered onto the pedestrian walkway near the bus stop. Upon arriving at the scene, ME3 Ang observed that the taxi had collided with the lamppost, causing the electrical panel to be knocked down.

The damaged taxi encroached onto part of the slip road leading to Tengah Air Base, posing a road hazard, while the knocked-down electrical panel exposed live wires along the pedestrian walkway, stressing the need for prompt action to ensure public safety. Recognising the seriousness of the situation, ME3 Ang took control and sought assistance from security troopers to cordon off the area with exposed wires. He then aided the shocked taxi driver out of the vehicle and guided him to a nearby bench to recover and provided assistance to the driver. After stabilising the driver, ME3 Ang directed a security trooper to guide incoming vehicles into TAB due to heavy traffic. In addition, ME3 Ang observed that a trooper was standing between the traffic barrier and the incident taxi, and promptly advised the trooper to relocate to a safer spot.

ME3 Ang effectively managed the situation until the fire department arrived, ensuring a smooth handover of command. His quick thinking and leadership skills maintained order and ensured safety for those in the area. With strong safety instincts and a dare-to-care attitude, his swift actions prevented the accident from escalating, which earned him the Outstanding Safety Award.

Outstanding Safety Award



From left to right: CPT Cheong, CPT Chan, MAJ Chua, MAJ Tan Zing Zung (COMD 1 AELG), LTC Daren Lin (COMD UG), COL John Nehemiah Samuel (COMD UC), CPT Toh, ME4 Kong, MAJ Lim En Meng (Dy CO 119), SLTC Chan Hoo Liat (COMD IXG)

On 13 Sep 2023, MAJ Kent Chua, CPT Chan Feng Kuan, CPT Cheong Rong Hao and CPT Tok Shi Xuan from 119 SQN, along with ME4 Alvin Kong Yen Chin from 811 SQN, displayed strong professionalism and team excellence in handling an unprecedented emergency on the Heron 1 UAV.

After completing a training sortie in Exercise Forging Sabre 23, the crew encountered persistent GPS failures on the UAV and compounded emergencies such as Differential Global Positioning (DGPS), datalink, and object position and tracking system (OPATS) failures. Despite multiple sensor resets and navigating without accurate sensors, CPT Chan and CPT Cheong maintained composure and displayed resourcefulness in ensuring safe operations by attempting various methods to regain GPS sensor priority. They also requested radar vectoring for situation awareness and demonstrated commendable grit and resilience, persevering with recovery efforts over a protracted period.

Subsequently, they handed over controls to MAJ Chua and CPT Tok for the aircraft's recovery where they performed multiple missed approaches to ensure positional accuracy before successfully recovering the UAV. With exceptional airmanship and proficiency, they safely landed the non-operational aircraft according to the OEM's recommendation.

ME4 Kong provided invaluable engineering advice to the pilots throughout the emergency. Drawing on his deep technical knowledge, he facilitated the recovery of Heron 1's navigation source and initiated contact with the OEM before translating the OEM's intentions into an actionable plan crucial for the aircraft's safe recovery.

The teamwork, professionalism and fighting spirit demonstrated by the team were truly commendable and showcased strong operations and logistics partnership. In recognition of their exceptional performance and team excellence, MAJ Chua, CPT Chan, CPT Cheong, CPT Tok and ME4 Kong were awarded the Outstanding Safety Award.

RSAF Safety Officers' Course



AFI conducted the 02/23 RSAF Safety Officers' course from 15 Feb to 1 Mar 2024 as part of the RSAF's ongoing effort to build a strong safety culture. 24 officers, including officers from RBAirF, RMAF, TNI AU and RTAF successfully completed the course. This course aims to equip all personnel with the knowledge and tools to contribute towards safety at their respective workplaces.

HUMAN FACTORS IN AVIATION SAFETY (HFAS) COURSE



AFI successfully coordinated and managed the Local Human Factors in Aviation Safety (HFAS) Course from 30 Oct to 2 Nov 2023. The specially tailored course was conducted by the lecturer from Nexus France and was held at the Air Force Training Command.

23 RSAF personnel and one TNI-AU officer attended the course. Key topics such as Human Factors concepts, models and case studies were shared and discussed over the 4-days course.

Human Factors Education



The Human Factors (HF) Awareness Programme and the Human Factors Management Workshop were conducted at Air Force Museum on 25 to 26 Jan 2024 respectively. Participants were educated and apprised of the latest HF knowledge and tools that would help reduce HF incidents/accidents in their workplaces.

RSAF COs' Conference 2024

The RSAF COs' Conference 2024 took place at Temasek Club on 2 and 3 Apr 2024, with the theme being "**Strengthening Fundamentals Through Team Excellence**". The conference which was organised by AFI provided a central platform for HQ RSAF to share the safety issues and trends, the latest policies, best practices across the units and leadership sharings from past COs with current COs and Dy COs. It also allowed the COs and Dy COs to share ideas and experiences among themselves and provided them with the opportunity to engage with the senior RSAF leadership on the strategic direction for the upcoming work year.



RSAF TOTAL WSH (WORKPLACE SAFETY & HEALTH) DESIGN & BRANDING COMPETITION

Unleash your artistic spirit in three powerful dimensions! Send us your most creative Total WSH poster, logo, or tagline- or submit all 3 to be featured in our Total WSH campaign!

Design an eye-catching poster design



Design a brand logo



Come up with a catchy tagline



**SUBMISSION BY
1 JULY 2024**



• WIN ATTRACTIVE PRIZES



- No restriction on the number of submissions
- Additional points will be awarded for submissions that integrate all three collaterals (poster, logo, tagline) into a cohesive campaign.
- Visit AFI's website on the intranet for more information and competition rules

**WIN!
S\$30
WORTH OF
VOUCHERS!**

FOCUS "True or False" Safety Quiz

Test your safety knowledge and win a prize by taking part in our **FOCUS** "True or False" Safety Quiz! You can find the answers inside the articles of this current issue of the **FOCUS** magazine.

Email your answers with your Rank/Name, Unit, Contact number and last 4 digits of your NRIC to AFI (ME3 Su Xinyi) by 5 JUL 24. All correct entries will be balloted and 3 winners will each receive S\$30 worth of NTUC FairPrice vouchers.

The safety quiz is open to all SAF personnel except personnel from AFI and members of the **FOCUS** Editorial Board.

FOCUS 118 WINNERS

ME3 Seng Kong Tard
PC, QAC

ME3 Leong Kwong Meng
5 ALEG

ME2 Sng Mingguang
208 SQN

Chief of Air Force's Speech

1. The 3 habits to safely architect RSAF 2040 are: be curious, be critical, and create capacity. (True/False)

Head Air Engineering and Logistics' Speech

2. The framework SAFE (Situate, Assess, Follow through, Entrench) will help to ensure a stronger safety culture in the RSAF. (True/False)

Head Air Operations' Speech

3. The five key lessons from last year's incidents.

- a) Healthy habit patterns will help arrest incidents from happening.
- b) Know the limits and recognise your boundary conditions.
- c) Set aside ego, exercise "trust but verify".
- d) Stop re-learning mistakes.
- e) Speak up: flying is a team sport.

(True/False)

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**CLEARED LAND
36 CENTRE**
”

EFFECTIVE
COMMUNICATION

ALWAYS CHALLENGE IF UNSURE

