

GENERAL AVIATION SAFETY STRATEGY

AND IMPLEMENTATION PLAN 2020/2021 – 2024/2025





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ABBREVIATIONS

AIMS	Aviation Integrated Monitoring System	NPL	National Pilot's Licence
AME	Aviation Medical Examiner	PEL	Personnel Licensing
APP	Annual Performance Plan	PESTLE	Political, Economic, Social, Technological, Legal Environmental
ARO	Aviation Recreation Organisation	PMI	Periodic Maintenance Inspection
ASIB	Aviation Safety Investigation Board	PPL	Private Pilot's Licence
ATC	Air Traffic Control	RPAS	Remotely Piloted Aircraft Systems
ATNS	Air Traffic Navigational Services	SACAA	South African Civil Aviation Authority
ATO	Aviation Training Organisation	SACAR	South African Civil Aviation Regulation
AU	African Union	SARPS	Standards and Recommended Practices
CARS	Civil Aviation Regulations	SWOT	Strength, Weakness, Opportunity, Threats
C-FARP	Cross-functional Accident Reduction Plan		
CRM	Crew Resource Management		
DCA	Director Civil Aviation		
DFE	Designated Flight Examiner		
DRC	Democratic Republic of the Congo		
EGM	Educational Guidance Material		
EIA	Environmental Impact Assessments		
ExCO	Executive Management Committee		
GA	General Aviation		
GAARP	General Aviation Reduction Plan		
GAARS	General Aviation Reduction Strategy		
GASDF	General Aviation Discussion Forum		
GASG	General Aviation Safety Group		
GASIS	General Aviation Safety Impact Seminar		
GASS	General Aviation Safety Strategy		
GASS-FC	General Aviation Safety Strategy-Focus Group		
GASS- WG	General Aviation Safety Strategy-Work Group		
GDP	Gross Domestic Product		
ICAO	International Civil Aviation Organisation		





SACAA General Aviation Safety Strategy and Implementation Plan 2020/2021 – 2024/2025

Official Sign-off

It is hereby certified that this Strategic Plan:

- Was developed by the staff of the South African Civil Aviation Authority under the guidance of the Executive and Board and in consultation with the industry.
- Takes into account all the relevant policies, legislation and other mandates for which the SACAA is responsible.
- Accurately reflects the Impact, Outcomes and Outputs which the SACAA will endeavor to achieve over the period 2020/21 to 2024/25.
- Has been approved by the Director of Civil Aviation.

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Mr Simon Segwabe Executive: Aviation Safety Operations

Date: 20 March 2020

Ms Poppy Khoza Director of Civil Aviation

Date:

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1. INTRODUCTION

General aviation accidents and incidents, if left unabated, can and will cause irreparable harm to the reputation and rating of South Africa as a training and tourism destination. The after-effects of accidents are often far worse than generally perceived or considered. The media fail to report how accidents devastate lives and bring about immeasurable suffering to those involved and to their families over the loss of a loved one or breadwinner; often adding the burden of caring for those who have been maimed, impaired or incapacitated for life. This Safety Strategy aims to play an an effective role in reducing accidents in the General Aviation sector.



The South African Civil Aviation Authority (SACAA) is a public entity established in terms of the Civil Aviation Act, 2009 (Act No. 13 of 2009), as amended. The Authority is tasked with regulating civil aviation safety and security and overseeing the functioning and development of the civil aviation industry in South Africa. The Public Finance Management Act classifies the SACAA as a Schedule 3A entity, which means the organisation is not expected to generate any profits, while functioning autonomously. Government, more specifically the Department of Transport, is the executive authority tasked with the ultimate agency oversight and is one of the major beneficiaries of this strategy.

The development of a renewed General Aviation Safety Strategy (GASS) has been noted in the South African Civil Aviation Authority (SACAA) 2019/2020 quarterly targets. This was listed as:

"Develop a General Aviation (GA) Safety Strategy and Implementation Plan for approval by the Director of Civil Aviation (DCA)".

In recent decades, General Aviation in South Africa has begun building bridges between nations and generations. GA is no longer merely a rich man's hobby, but has become a place of transformation and empowerment. The demographic composition of candidates reporting for pilot examinations demonstrates the grave importance and need to introduce an effective programme to prevent and reduce accidents, whilst at the same time responding to the national and international imperatives. GA has become an important earner of foreign currency; a national asset worthy and in need of protection. GA has also become a provider of occupational and other career opportunities, and feeds both the domestic and international commercial aviation sectors with pilots, thereby ensuring global inter-connectivity.

South Africa is a signatory State to the Chicago Convention of 1944 and therefore a member state of the International Civil Aviation Organization (ICAO). ICAO sets Standards and Recommended Practices (SARPs) and States such as South Africa



adopt these into the legislative environment and develop the requisite regulations in line with the local context, being mindful of the sovereignty of South Africa.

2. BACKGROUND

The SACAA must emphasise the reduction of accidents in the GA Sector as an outcome of the organisation's fiveyear strategy, moving forward.

It is clear from the available statistics that airline operations demonstrate higher levels of flight safety than shown in GA.

The factors promoting these higher levels of safety in airline operations could be listed as:

Very high levels of oversight and control.

The monitoring of flight profiles and corrective feedback provided for any exceedance, known as the Aviation Integrated Monitoring System, (AIMS).

Meticulous pre-flight planning and the availability of Notices to Airmen (NOTAMs) and meteorological data, including satellite photographic images.

Extensive initial type-rating programmes.

High levels of technical training and testing.

Multi-crew resource management training (CRM).

Intensive recurrent training programmes, including both technical and flight handling skills.

Highly experienced instructors.

Modern technical and flight training facilities

The maintenance of discipline by both the airlines and crew.

Professional Standards Committees within the various pilot associations.

Active peer review and checking of flight standards.

Multi-crew operations.

Meticulous flight crew selection procedures and psychological profiling.

Intensive medical examinations on a regular basis.

Care groups created within airline structures to deal with the personal problems experienced by flight crews.



GA generally does not experience these collective and complementary flight safety provisions. It is therefore necessary to investigate how the above elements can be introduced or improved in GA.

3. THE RATIONALE BEHIND GENERAL AVIATION ACCIDENT REDUCTION

Reducing the number of GA accidents is a national, regional and international imperative, with due consideration for the sovereignty of other ICAO Contracting States, as South African aircraft operate in other regions and sometimes become involved in accidents there, at times with high fatalities per accident (Annex. F of the implementation plan). Significant examples include a South African Beech 1900 accident with 17 fatalities during United Nations operations in the Democratic Republic of the Congo (DRC), a PC-12 accident with nine (9) fatalities and a Metroliner accident with 14 fatalities on different dates in Kenya. The list continues.

The proposals herein, not claiming to be the panacea for preventing all accidents, represent major unprecedented steps towards reducing GA accidents. If we hope to effectively reduce all accidents in all affected areas, the conventional definition of GA would be far too limiting. Light aircraft are commonly perceived by the public as comprising all GA aircraft, but without regard for any specific operation for which the aircraft may have been used.. The SA Civil Aviation Regulations (SACAR) confine the definition of GA operations to 'non-commercial'.

An overly segmented or compartmental approach would hamper the implementation of new recommendations, whereas a broader interpretation of GA would be more effective in addressing improved safety. While airline operations can be considered safe and largely self-governed, South Africa not having had a major air-disaster since 1987, the situation in GA is virtually diametrically opposed. The extensive nature of an effective programme warrants the involvement of alliance partners, e.g. the Commercial Aviation Association of South Africa (CAASA) and the Aeroclub of South Africa. In-principle pledges of support and participation have been obtained, but with vital preconditions, i.e.

A sense of urgency.

Timely allocation and deployment of the necessary staff, resources and funding.

Continued adherence to international best practice, consultation and consensus.

A viable plan with clear goals, objectives and implementation dates.

A phased-in approach with distinct developmental phases.

Diagrams in this proposal depict the pathway of change, the staff and resources needed, the processes to be followed and the desired impact. The proposals herein are the result of prior consultations and much deliberation and promotes cross-functionality and co-ordination within the SACAA.

Quote: 'Why do aviators become ensnared by virtually the exact same causes and recurring accident patterns?'

Johan Lottering – Avoiding Fatal Flying Traps (2010); p. 1.

4. MANDATE

The mandate for drafting and implementing the General Aviation Safety Strategy (GASS) is found in the Annual Performance Plan (APP) 2019/20, Chapter 3 (3.2.1(b)), 'to lower and reduce the number of accidents and fatalities' in GA. The GASS is aligned with the APP aspirations for the financial year April 1, 2019 to March 31, 2020, which stated that a suitable plan must be ready for implementation in phases, commencing on April 1, 2020 for a five-year cycle ending on March 31, 2025. It was also necessary to consider the 2020/25 SACAA strategy and to focus on the aspirational goals and strategic objectives of the broader SACAA strategy applicable to this proposal.

4.1 CONSULTATION

This proposal considers recommendations from prior consultations and interactions, i.e.

- Consultation with 25 internal delegates of the South African Civil Aviation Authority (SACAA) during a full-day session at the Stones Conference Centre in Midrand on June 20, 2019.
- Consultation with 22 external delegates of the South African GA industry during a full-day session at the Accolades Conference Centre in Midrand on June 26, 2019.
- A series of deliberations of a group involved during the last cycle in 2018/19 of the Cross-functional Accident Reduction Plan (C-FARP), in which experts of the SACAA and safety protagonists from the aviation industry participated.
- A four-day workshop with all Aviation Recreation Organisations (AROs) to discuss the existing model of regulating recreational aviation in support of safety in the sport and recreational aviation environment.

IT WAS CONCLUDED THAT TO REDUCE ACCIDENTS:

- A multi-faceted, multi-disciplinary and integrated effort would be vital;
- Only an all-out sustained and concerted effort, supported by the necessary resources and 'buy-in' from all stakeholders, would ensure sustained success;
- Stakeholders would co-operate in the required areas under the guidance and leadership of the SACAA.

4.2 CONSENSUS

The consensus from the broad-based consultations and interactions mentioned above, and other meetings, was that to reduce accidents, the emphasis must be on EDUCATION and TRAINING. This will be implemented during the presentation of a series of General Aviation Accident Reduction Seminars (GAARS); empowering the GA industry and creating an environment conducive to further advancement and development through the promotion of safety and the reduction of accidents to the lowest level reasonably possible.



4.3 APPROACH

With accident-prevention as a priority among all aviation participants, role-players and stakeholders, alignment with the SACAA brand promise of 'keeping you safe in the sky' had to be maintained. The overall approach is to reduce GA accidents through continued professional development, education and training. The emphasis is on improving professionalism, competence and airmanship. This approach is in harmony with the broadbased consensus to reduce accidents by overcoming shortcomings in education and training, especially in areas not covered by conventional curriculums.

5. STRATEGIC THRUST

The SACAA has developed a five-year strategy in line with and in compliance to the Authority's legislative obligation. The Department of Planning, Monitoring and Evaluation has developed a new framework and guidelines for Schedule 2 and 3 entities as well as governmental, national and provincial departments. In terms of the new framework, the Authority is expected to submit a five-year Strategic Plan for the 2020/2021 – 2024/2025 and an Annual Performance Plan for the 2020/2021 financial year.

Since the General Aviation Safety Strategy follows the direction and focus of the new organisational strategy, the final GASS must ensure full alignment with both the organisational Strategic Plan and APP documents. The outcomes and outputs of the five-year strategy are therefore aligned with this strategic thrust.

At the time of drafting this strategy, the organisation had adopted the following core ideology and organisational impact:

5.1 SACAA CORE IDEOLOGY

In alignment with the organisational strategy, the General Aviation Safety Strategy (GASS) will support the realisation of the organisation's strategic core ideology, as follows:

MISSION:	To regulate civil aviation safety and security in support of the sustainable development of the
	aviation industry.
VISION:	A world-class civil aviation authority.



BRAND PROMISE: For the next five years, the organisation is maintaining the brand promise: *Keeping you safe in the sky.*

This brand promise must undergird all the actions and messages of the organisation when dealing with its stakeholders. The brand promise and what we are doing to achieve this, forms the basis of our key messages as an organisation and must be communicated effectively and consistently to all stakeholders.

KEY MESSAGE:	AGE: KEEPING YOU SAFE IN THE SKY						
TONE AND VOICE:	How we exp THE TONE	ress our voice in the industry IN THE MESSAGING IS DRAWN FROM	I THE BRAND PERSONALITY.				
GA SAFETY IMPACT SEMINARS (GASI)		GA SAFETY GROUP (GASG)	GA SAFETY DISCUSSION FORUM (GASDF)				
To obtain group participation, interaction and discussions in helping pilots find solutions in time-critical situations.		To pursue the aims and provide guidance, oversight, structure and direction.	To establish trends and derive optimum benefit from previous high-fatality accident reports under the auspices of the SACAA, with the participation of the Accident and Incident Investigations Department.				

VALUES: The Values of the SACAA for the five-year period from 2020 to 2025 are as follows::

- Integrity Maintain high ethical standards and approach issues professionally with integrity, without any bias and in a transparent manner that engenders trust amongst all our stakeholders
- Service excellence Service delivery ahead of customer expectations, striving to always exceed customer expectations.
- Teamwork Working with others and taking joint accountability for the results.
- Collaboration Working together to achieve mutually beneficial goals.

The expectation is that the Authority will live up to the above values, and that stakeholder relationships will be measured against these.

5.2 ORGANISATIONAL IMPACT

The Board and management have approved the following impact statement for the next five-year, Medium-Term Strategic Framework period:

Safe, secure, efficient and sustainable civil aviation regulation that contributes to socio-economic growth.



5.3 ORGANISATIONAL OUTCOMES

The Board and management have adopted the following strategic outcomes as the cornerstone for the achievement of the new five-year strategy:							
Outcome 1:	Strengthened effectiveness of Authority oversight						
Outcome 2: Financial sustainability							
Outcome 3:	Enhanced human capital management						
Outcome 4:	Innovation and technology management						
Outcome 5:	Improved stakeholder engagement and service delivery						
Outcome 6:	Sustained good governance						

The Strategic Goal relevant to this strategy is Outcome No. 1, i.e. Strengthened effectiveness of Authority oversight.

6. PROBLEM STATEMENT

As GA does not generally experience the collective and complementary flight safety provisions seen in the highly regulated scheduled commercial airline sector, it is necessary to investigate how the elements below can be introduced to improve GA safety.

The most crucial problem to address would be that of recurring fatal accidents with virtually identical causal factors, patterns and origins that aviators and the industry seem unable to avoid, manage or eliminate. Part of the challenge is to develop legislation to ensure compliance and help produce the desired results.

As many aviators resent change or fear 'over-regulation', the attendance of General Aviation Accident Reduction Seminars (GAARS) as the main counter-measure or remedial action against accidents herein proposed would have to be compulsory, though for the common good of all stakeholders and participants.

Another challenge would be the measuring of results, which would have an impact on future funding.

The analogy between direct sales advertising and brand advertising would be appropriate. The former would yield immediate sales and a rush of customers. The latter would be subtler and more indirect, but positively influence attitudes and behavioural



patterns over the long term. The problem of measurability could be resolved by developing realistic, relevant and appropriate indicators and criteria. This shall form part of the outcomes.

THE FOLLOWING PROBLEMS NEED TO BE ADDRESSED:

- a. Contemporary accident reports and statistics show that pilots remain the weakest link in the accident causation chain and should be the focus area.
- b. The standards of primary instructors leave much to be desired. The system of inexperienced pilots acting as *ab initio* trainers directly and indirectly results in fatal training accidents.
- c. Recommendations from accident and incident reports and trends are seldom converted into accidentprevention strategies or incorporated into training curricula
- d. Major causal and contributory factors of accidents are rooted in a de-sensitised society; i.e. widespread disregard for the value of life or well-being and safety of fellow-citizens, general resentment towards authority, a culture of lawlessness, an appetite for risk and ingrained misconceptions and weaknesses in training.
- e. Existing accident-reduction techniques using heuristics to reduce the probability of accidents are believed to be ineffectual; adding to the cognitive workload of pilots and tending to overwhelm them.
- f. The criminogenic origins and development of accidents have never been explored nor understood.
- g. Pursuant to (f) above, the Civil Aviation Act, 2009 (Act No. 13 of 2009), 11, (2), (3) and (4) limits aircraft incident and accident investigations by the Aviation Safety Investigations Board (ASIB) by not apportioning blame, but by having the purpose of preventing accidents. This hampers attempts to reduce accidents through prosecution and punitive actions.
- h. Training curricula do not address or illustrate the problem of how accidents develop, what the accidentprecipitating circumstances might be and how the causal and contributing factors can be identified, managed or eliminated.
- i. Flying training theory and practical training are aimed at career goals, while accident causal and contributing factors and circumstances conducive to accidents are negated or not addressed at all.
- j. Pilots are not equipped to deal with factors external to the cockpit that overwhelm them. These include but are not limited to undue pressures on pilots, negative group dynamics, unrealistic expectations and misconceptions.
- k. Pilots need guidance and mentorship programmes to enable them to recognise and avoid potential errors in judgement and to improve decision-making skills.
- I. The strategy provides participants with a dedicated or independent publication and social media as platforms for aviation safety messages.



- m. The threat of Remotely Piloted Aircraft Systems (RPAS) to aviation safety has been escalating. Solutions need to be found to avoid a catastrophic event, especially from a GA perspective; as RPAS are often operated at the confluence of airways near busy centres in controlled airspace.
- n. Support to both medical professionals as well as pilots must be enhanced, to develop systems to ensure the integrity of medical assessments on the one hand, and to provide mechanisms to pilots to deal with the stressors related to the demands of the cockpit environment on the other hand.



6.1 CONFLICT OF INTEREST WITH TESTS

The problem of conflict regarding skills tests is dualistic in nature:

Skills tests are not conducted in a fully transparent manner and may be reduced to tick box exercises; as failing a student would reflect poorly on the findings of the initial appraisal of talent and aptitude of aspirant students by the very Aviation Training Organisation (ATO) under the auspices of which tests are conducted. The defence mechanisms would include deferring liability by blaming (former) students for poor performance or lack of dedication.

A system of independent testing and more objective initial aptitude and talent appraisals needs to be developed as part of an effective accident-reduction strategy. The current system of Designated Flight Examiners (DFEs) being directly remunerated by test candidates and/or ATOs, is laden with the potential for conflict of interest. Many DFEs earn their primary income from tests for professional pilot's licences and ratings; while DFEs with regular airline occupations earn a coveted supplementary income. Both full-time and part-time DFEs therefore have compelling reasons for being lenient and popular; with a high probability of allowing low test standards.

From the perspective of reducing accidents, the situation warrants closer scrutiny. One solution would be for the SACAA to control the booking and allocation system, set tariff scales and control payment processes – as an extension of the functions of the Pilot Examinations Licensing System (PEL) Department.

A conflict of interest is believed to have been prevailing in the training industry for years, in certain cases transpiring already during initial student aptitude evaluations, to manifest during subsequent skills tests. Weaknesses induced by the training and testing system contribute to numerous GA accidents.

6.2 INSTRUCTION STANDARDS – WARNING SIGN

The standard of **'ab initio'** instructors has been a problem with which industry representatives have been contending for years. The professional entry requirements for Grade III instructors are considered as being far too low, resulting in a situation of 'the blind leading the blind'.

Though instructors' protégés pass initial knowledge and skills tests, their subsequent performance during retests often show remarkable regression and a lack of understanding of the fundamental principles pertinent to air safety. Enhancements will therefore be made to the training process to create a greater sustained awareness of air safety.

The problem with low instruction entry requirements needs to be resolved through consultations with relevant stakeholders, including SACAA officials and experienced members of the industry; resulting in recommendations to the DCA.



6.3 AVIATION MEDICALS – WARNING SIGNS

Several occurrences provide clear evidence of the questionable wellbeing of pilots as causal or contributing factors in accidents and air disasters; indicating that the medical certification system may be far from fool-proof; warranting a paradigm shift and certain reforms both globally and domestically.

The GASS will play a vital role in facilitating awareness campaigns and communicating the relevance of such threats to pilots in the GA environment; as part of the GAARS (Annexure A; Scenario 2) with the support of the AME and other departments.

6.4. AIR TRAFFIC CONTROL - MISCONCEPTIONS

Many GA pilots have an unrealistic fear of air traffic control (ATC). Such fears may result in blind obedience or pilots avoiding or limiting contact with ATC; causing a latent condition underlying certain GA accidents. Significant strides have been made in overcoming such fears and demystifying misconceptions through knowledge and education; e.g. requirements to write the respective Restricted and General Radiotelephony Operator's examinations at the SACAA. The type of questions in the databank are not always realistic or sensible, and needs to be simplified.

In certain circumstances that led to accidents, pilots adhered to ATC clearances without considering the consequences. In airspaces where multi-faceted operations take place, ATCs may be over-assertive. Focussing mainly on separation and flow-control, ATCs may prioritise traffic in accordance with the schedules and occupants aboard, thereby negating the plight of GA aircraft.

The onus of maintaining safe separation is often placed on GA pilots and even students, thereby relying on the weakest link in the airspace. It may be prudent to consider regulatory reforms in consultation with Air Traffic and Navigation Services,(ATNS), to allocate priority to solo students and change the status of a circuit to a 'solo-student circuit' in which the latter gets preference.

The GAARS scenarios would address such issues.

The production of a video-clip for use during seminars (GAARS) to help eliminate misconceptions that have led to high-fatality accidents, would be highly effective.



6.5 AIRCRAFT AIRWORTHINESS STATUS – MISCONCEPTIONS

The conventional GA aircraft such as the Beech, Cessna, Mooney and Piper have become more costly to maintain, due to extra requirements associated with age and extra paperwork and administration, resulting, in turn, in longer down-times.

The additional costs related to the preventative maintenance measures while within the calendar limits of airworthiness, may cause pilots and owners to opt to run the risk of flying aircraft that have been inactive for long periods of time, sometimes with disastrous consequences. Misconceptions that exacerbate such practices are that an aircraft is 'most airworthy' directly after Periodic Maintenance Inspections (PMI) or equivalent inspections with e.g. Non-Type-Certificated Aircraft (NTCA); or that it "should be fine" when it has been standing for a long time . The abovementioned phenomena are not covered by conventional training curricula.

The most effective way of preventing accidents of the above nature would be to address accident causal or contributory factors of a mechanical and technical nature by means of the General Aviation Accident Reduction Seminars (GAARS), with the aid of experienced presenters.



7. PATHWAY OF CHANGE

The diagram below depicts the salient points of the pathway of change associated with the GASS; and the desired inputs,

activities, outputs, outcomes and mpact.

A. Inputs – What can be used to facilitate the production of outputs?





8. CONSIDERING THE OPERATIONAL ENVIRONMENT

In developing the GA Aviation Safety Strategy (GASS), the GA environment was considered and the following operational scenarios were plotted through undertaking a SWOT and PESTLE analysis.

SWOT Analysis

Having scanned the GA Accident rate, the following SWOT analysis was compiled and gives direction to the relevant organisational objectives. These objectives address strengths and weaknesses, with the purpose of maximizing strengths and taking advantage of opportunities.

STRENC	GTHS	WEAKN	ESSES
a.	SACAA guidance and commitment.	a.	Opinions too diverse to be effective.
b.	Capabilities and calibre of participants.	b.	Apathy, complacency and working in isolation.
С.	Motivation of participants.	C.	Improper prioritising.
d.	Industry backing and participation.	d.	Forfeited oversight and control.
e.	Strong and reliable alliance partners.	e.	Loss of synergy with industry.
f.	Innovative approach.	f.	Target audience anticipating previous approach.
g.	Past pitfalls avoidable.	g.	Over-emphasis or tunnel vision.
		h.	Propensity to repeat old mistakes and habits.
OPPOR [®]	TUNITIES	THREAT	S
a.	To involve women and the disabled, e.g. use	a.	Lack of funding, resources and a sense of urgency.
	pilots that have been involved in accidents as	b.	Resistance to providing co-operation and support,
	trainers.		both internally and externally.
b.	Reaching the youth, e.g. during National	C.	Materials to be developed may be watered down
	Aviation Safety Week, regarding a positive		through amateurism.
	safety culture and aviation career	d.	Diversity of opinions may cause digression and a
	opportunities.		reduced impact.
C.	To leave a legacy of Educational Guidance	e.	Emphasis on international trends may result in a
	Material (EGM) using technological means.		disregard for local conditions.
d.	To be among the leaders in the field of	f.	Added requirements may place the Instrument
	aviation safety and accident reduction.		Rating beyond the reach of the average pilot.
e.	To place instrument flying within more	g.	Initiatives could be usurped and over-
	aviators' reach by streamlining the IR exam.		commercialised.
f.	To develop Public-Private Partnerships.		



PO	LITICAL FACTORS	EC	ONOMIC FACTORS
a.	Governmental policies require compliance with	a.	The adage, 'if you think safety is expensive, try an accident'
	international best practice and ICAO requirements		would apply to —reservations about the safety strategy due
	before programmes such as these can be implemented.		to the potential financial implications of the proposed
	The proposed programme will make good on socio-		strategy.
	political requirements.	b.	Loss of foreign currency and legal liability claims. Unless
b.	The application of the proposed strategy will conform to		curbed, loss of life of foreigners through GA accidents, as
	the governmental policy guidelines of involving women,		occurred in the ecotourism and training sectors, could
	the youth and the disabled.		deprive the country of vitally- needed future participation and
C.	South Africa, the SADC and other states belonging to		investment, and lower the contribution of aviation to the
	the African Union (AU) will benefit directly and indirectly		Gross Domestic Product (GDP). Intervention is vital.
	from the standardisation of accident-reduction	C.	The exchange rate renders imported items extremely
	measures and programmes aimed at reducing aircraft		expensive and unaffordable to many, increasing the
	accidents.		potential for maintenance shortcuts and neglect, and adding
d.	Governmental policies are in favour of empowering the		to the ageing fleet phenomenon.
	youth. The proposed strategy will build bridges between	d.	The loss of a single life has been quantified as roughly R 30 $$
	the older generation of aviators, who have vast		million. The further implication of losing entrepreneurs
	experience, and the younger generation of pilots and		through death or disability warrants expenditure in
	aviators.		implementing the accident reduction strategy.
e.	Policies relating to 'alternative means of compliance' to	e.	The loss of aircraft and man-hours per accident are
	requirements can undermine effective root cause		significant, whereas fewer accidents may result in lower
	analyses and the quest for solutions.		insurance premiums.
SO	CIAL FACTORS	TEO	CHNOLOGICAL FACTORS
a.	Society has an appetite for risk and a disregard for	a.	Due to the unfavourable exchange rate, South African pilots
	safety, which also applies to aviation.		sometimes cannot afford to update navigation databases on
b.	Aviators are part of a societal culture in which anti-		avionic equipment such as the Global Positioning System
	authoritarian attitudes and resentment towards laws,		(GPS) more regularly. Prolonged intervals between updates
	rules and regulations are fostered.		may result in airspace infringements and other
C.	Aviation fatalities pale in significance against the		infringements such as runway incursions.
	backdrop of a high number of murders and road deaths	b.	Technological platforms or media can be powerful tools of
	per capita, diminishing the perceived value of attempts		persuasion in the accident-reduction strategy. Audio-visual
	to reduce aviation accidents.		recordings, though expensive to produce at first, may have
d.	Aviation crews operating away from home are subjected		long-term benefits; such as the impact on both cognitive and
	to social factors such as alienation and adverse group		subconscious levels, having longevity and providing readily



dynamic pressures - being removed from primary support groups and structures for extended periods.

- e. Aviation crews operating away from home for extended periods may therefore be subjected to relationship and familial problems, which frequently include divorce, and children developing behavioural problems like drug addiction or the use of alcohol, aggravated by the 'absent spouse syndrome'.
- f. The long absences from home may also disrupt sleeping patterns or lead to psychological problems such as a sense of 'alienation' or 'anomie' which may go undetected, but have a direct influence on pilot proficiency, decision-making skills and the way in which flights are planned and managed.

weather conditions and high-density altitudes are major determinants, especially in GA accidents. GA pilots available high-impact Educational Guidance Materials (EGM).

- Other technological media adaptable to mobile devices like C. tablets and mobile phones can and should be used to convey life-saving messages more rapidly and render communication in the idiomatic format with which all aviators, especially the 'new millennials', can strongly identify.
- E-learning workshops, making use of virtual platforms such d. as Skype and audio-visual recordings, will be used during recurrent training or to accommodate individuals or groups who are unable to attend in person.

EN	/IRONMENTAL FACTORS	LE(GALFACIORS
a.	Aerial destinations are not always adequately	a.	SACARS 2011, 61.03.1 'Requirements for a Private Pilot's
	maintained or overseen, or may be inadequate to begin		Licence (PPL) needs to be amended to include 61.03.1 (6)
	with, and are not necessarily safeguarded against		'to have attended a General Aviation Accident Reduction
	threats such as animals and pedestrians on the runway.		Seminar (GAARS) under the auspices of the SACAA in the
b.	Airstrips that have been developed in known corridors		preceding 24 months.' The amendment may be applied to
	add to congestion and the propensity for aerial		SACARS 2011, 91.02. 1, with clause '(5)' to this effect being
	collisions. Certain strips have been developed without		added; while SACARS 2011, 62.03.1, 'Requirements of a
	prior consultative processes or Environmental Impact		National Pilot's Licence (NPL)', with clause '(c)' to this effect
	Assessments (EIA).		being added.
C.	Aerial destinations, especially in the ecotourism sector,	b.	Article 38 of the Chicago Convention allows for the filing of
	are often unsuitable for certain types of aircraft using the		differences, justified under a Contracting State's specific
	airfield facility and lack emergency facilities; or may be		needs. ICAO Safety Oversight Manual, Doc. 9734, clauses
	surrounded by informal settlements, leading to runway		2.2.5 (b) and (c), 3.2.2.1 and 4.2 provide for the filing of a
	infringements by pedestrians and theft of airport		difference for the attendance of GAARS as a requirement
	electrical equipment, lights, fuel, etc.		for the issue or renewal of a South African PPL or NPL.
d.	Environmental factors are a day-to-day consideration		Foreign licence holders may have to be exempted.
	for professional pilots. In South Africa, rapidly changing	C.	SACARS 2011. 61.11.3 pertaining to Theoretical



	need to be taught about environmental factors through		accident alleviating factor, should be simplified. The IR
	scenario-based training and mentorship programmes.		curriculum in 61.01.1 should be simplified.
e.	The impact of global warming and changing weather	d.	The development of legislation is necessary to ensure the
	patterns are not yet fully understood.		prosecution of pilots causing fatalities, etc. with due
			consideration for the spirit in which the Civil Aviation Act, 13
			of 2009, 11, (2) (3) and (4) was drafted, for accident
			investigations to be done not to apportion blame, but to
			prevent accidents.

Conclusion:

From the SWOT and PESTLE Analysis, it is clear that a multi-pronged approach is required to maximise the impact on GA safety and to achieve a reduction in the accident rate. This approach will rely on both internal and external participation. The SWOT analysis shows that it is both necessary and opportune to implement the GASS, and that the risk and consequences are managable and acceptable.



9. STRATEGIC OUTPUTS

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No.	Strategic Outputs
1.	CREATING A DELIVERY VEHICLE (GASG)
2.	CONTINUOUS PROCESSES OF GASS
3.	INTERNAL LIAISONS AND ENGAGEMENTS
4.	EXTERNAL LIAISONS AND DISCUSSIONS
5.	GENERAL AVIATION IMPACT SAFETY SEMINARS (GASIS)
6.	ESTABLISH ACCIDENT / INCIDENT TREND MONITORING FORUM
7.	DEVELOP EDUCATIONAL GUIDANCE MATERIALS (EGM)
8.	ESTABLISH A COMPETENT GASS PRESENTER TEAM
9.	OVERSEE AND MONITOR GASS
10.	ESTABLISH DEDICATED PUBLICATIONS (ALL MEDIA)
11.	CONTINUE SUPPORT FOR SAFETY PRESENTATIONS
12.	SIMPLIFY IR OPS EXAMINATION
13.	DEVELOP SACAA BRAND AND ENHANCE PUBLIC APPEAL
14.	ORGANISE NATIONAL AVIATION ACCIDENT REDUCTION WEEK
15.	CREATE FRAMEWORK FOR DEVOLUTION OF POWERS
16.	ESTABLISH RESEARCH PROJECT
17.	REDUCE THREAT OF RPAS TO GA SAFETY
18.	DEVELOP GA FOR GROWTH AND SAFETY
19.	MEDICAL SUPPORT to DAMES & PILOTS
20.	CONSIDER / EVALUATE PILOT AND INSTRUCTOR TRAINING SYSTEM



9.1 GA SAFETY STRATEGY (GASS) DELIVERY VEHICLE

Creating a suitable mechanism or delivery vehicle in support of the aims and objectives of the General Accident Safety Strategy (GASS) is a primary objective. The mechanism with the required functions and areas of responsibility is illustrated below.

A structured approach to managing a successful implementation plan will rely on all levels of staff within the SACAA. A Core Management Group with a specific mandate will facilitate a broad-based work group, who in turn will provide guidance to focus groups, who will drive the various strategic outcomes.

An overview of such a structured approach is depicted below:



The delivery vehicle is responsible for the co-ordination of the implementation plan and the prioritisation of specific outcome projects, through the work groups and focus groups. The GAARP will co-ordinate reporting to the DCA via the reporting structure.



9.2 CONTINUOUS PROCESSES OF GASS

Continuous interactive processes are necessary in support of the implementation of the aims and objectives of the GASS, and will be modified periodically in accordance with feedback and the evaluation of progress.

A) Developing realistic, relevant and appropriate indicators and criteria to measure the impact of the various outputs on the improvement of safety statistics.

B) Co-ordination of internal and external liaison and engagements and discussions

C) Drive project goals for all outputs

This will include-

- 1. Seminar Contents
- 2. Presenter/s Group
- 3. EGM and Syllabus
- 4. Regulatory Framework
- 5. Analyse Trends
- 6. Review Reports
- 7. Develop Articles
- 8. Social Media Alerts

9.3 OUTPUT – INTERNAL LIAISONS AND ENGAGEMENTS

The primary objective of the GA Safety Strategy (GASS) is a marked, not necessarily measurable change in the overall safety culture, with due consideration of the inputs of the industry from continuous consultations and liaisons. To ensure that quality and relevance are maintained, follow-up consultations will be vital and good relationships with stakeholders will have to be fostered, to also assist with broad-based support of all the outreach projects.

9.4 OUTPUT – EXTERNAL LIAISON AND DISCUSSIONS

On a national level representatives from industry bodies will have to be invited to interact with the GASS-WG in support of the aims and objectives of the GASS on a regular basis. Representatives from industry representative bodies and organisations will be consulted from time to time, to ensure that the GASS stays in touch and aligned with the industry needs and that 'international best practices' are being adhered to. The assessments of international role players, such as the approach taken by the Australian Transport Safety Bureau (ASTB) and the European Union (EU) to reduce road traffic accidents, would need to be studied to ensure that international best practices are being followed, or improved upon, and to consider trends in innovation and its impact on the outcomes of the GASS.

9.5 OUTPUT- GENERAL AVIATION ACCIDENT REDUCTION SEMINARS (GAARS)

The concept of GAARS is not only strongly supported by this document, but was proposed by the industry. The development and implementation of GAARS should be regarded as a **FIRST PRIORITY**. Such seminars would be analogical to Crew Resource Management (CRM) training and should be compulsory to attend for all Private Pilot's Licence (PPL) and National Pilot's Licence (NPL) holders and repeated every two years. According to consultative feedback, EDUCATION and TRAINING must be the basic vehicle/s of change to reduce accidents.



9.6 OUTPUT – ESTABLISH ACCIDENT / INCIDENT TREND MONITORING FORUM

Accident/incident trend predictions and the advocating of appropriate remedies and precautions by disseminating such information to ATOs and the industry at large, would be a useful method to proactively and predictively prevent accidents. The challenge is to convert such information into potentially life-saving messages.

Trend monitoring should be linked to other activities such as internal liaison meetings. Such a standard routine should be linked to 'Publicity/Publications' below. It is of the utmost importance to develop a mechanism to make optimal use of the compulsory reporting of safety events (incidents and accidents) and to use collated data to reduce accidents, and herein the GAARG should play a leading role.

Guidance Materials (EGM) are fundamental to the GAARS.

Primary areas of accident causation need to be covered during the production of audio-visual recordings for use in the implementation of GAARS.

These will typically include, for example, Loss of Control In-Flight (LOC-I), Controlled Flight IntoTerrain (C-FIT), Overloading & High Density Altitude, Extreme Flying, and Undue Domineering Influences.

9.7 OUTPUT – DEVELOP EDUCATIONAL GUIDANCE MATERIALS (EGM)

Accident causal factors should be brought into the educational spotlight, together with the underlying precipitating factors.

Scenario-based training, equipping pilots to recognise critical patterns and circumstances, some of which are external to the cockpit, is a vitally important delivery instrument.

Partnering with industry to develop safety presentations and equipping presenters is a vital part of the execution of the objectives of the GASS. For the programme to be effective though, fledgling aviators will have to be addressed in their own idiom, invariably involving technology.

To effectively reduce accidents, all factors and even the criminogenic origins of accidents, need to be revealed and better understood. Other societal factors may include 'normative deviance', 'disintegrating relationships, 'idiosyncrasy credits' and desperate economic circumstances and other related sociological and economic influences.

Areas that need to be addressed include cultivating the ability to recognise and address circumstances that could cause pilots that are under prolonged mental stress to act 'out of character', or show schizophrenic tendencies that could lead to accidents. Mentorship relationships need to be developed and cultivated as part of educational guidance.



9.8 OUTPUT – ESTABLISH A COMPETENT GAARS PRESENTER TEAM

The development of a syllabus for the presenters of seminars, including Progress and Mastery tests, needs to be initiated. The team that does the presentations needs to be established by and comprise experienced GA role players.

9.9 OUTPUT - OVERSEE AND MONITOR GAARS

The overseeing and administering of GAARS will necessitate a de facto body of oversight, with the duty to appoint the various representatives.

The format, style, content and performance must be monitored.

9.10 OUTPUT – ESTABLISH DEDICATED PUBLICATIONS (ALL MEDIA)

The GASS will have a dedicated publication to formulate and distribute accident-reduction recommendations in consultation with management and the relevant departments. The articles should ideally appear monthly in digital and printed format and be published annually as a compendium.

9.11 OUTPUT – CONTINUE SUPPORT FOR SAFETY PRESENTATIONS

The current Safety-First Aviator Campaign should be allowed to continue its cycle. The effectiveness of these presentations has been difficult to establish, though the calibre of the presenters would justify a positive reassessment.

9.12 OUTPUT – IMPLEMENTATION OF REVISED IR SYLLABI/CURRICULUM

Simplifying the Instrument Rating (IR) and Operational Procedure (Ops) requirements in a practical and sensible way, will eliminate a major obstruction towards reducing accidents.

Accidents due to unqualified pilots inadvertently or recklessly contending with Instrument Meteorological Conditions (IMC) represent a significant portion of GA accident statistics. Pleas and outcries by the industry in this regard have fallen on deaf ears over the years.

The curriculum has been reviewed recently, but not implemented. A reassessment and further refinements may be necessary for a GA-specific IR. The final format would depend on further review.

9.13 OUTPUT – DEVELOP SACAA BRAND AND ENHANCE PUBLIC APPEAL

The GASS must be highly visible to the public and aviation participants alike. A distinct identity should be cultivated. The message of commitment to safety and the reduction of accidents should be clear.

A strong promotional drive would therefore be necessary to help remove barriers, prejudices and resistance to change.



9.14 OUTPUT – ORGANISE NATIONAL AVIATION ACCIDENT REDUCTION WEEK

A biannual 'National Aviation Accident Reduction Week' focussing on brainstorming sessions or workshops, aimed at eradicating misconceptions and exposing accident causal and precipitating factors, needs to be planned. This National Aviation Accident Reduction Week will serve as a platform for accident discussion workshops.

The accident discussion workshops should be held concurrently with the National Accident Reduction Week. Primary and secondary schools, ATOs and even representatives of other ICAO Contracting States, especially on the African continent and particularly in the SADC, should be encouraged to participate.

9.15 OUTPUT – CREATE FRAMEWORK FOR DEVOLUTION OF POWERS

9.15.1 REGULATORY EMPOWERMENT

A devolution of the powers of safety oversight would help reduce GA accidents. Empowerment at primary levels could be achieved through regulatory development and will be more cost-effective and more effective in operational matters. This should enlarge the SACAA footprint in all private operational areas.

9.16 OUTPUT - ESTABLISH RESEARCH PROJECT

Dedicated research into the aetiologies of aircraft accidents in the South African context is vitally needed.

9.17 OUTPUT – REDUCE THREAT OF RPAS TO G.A. SAFETY

With the rapidly developing RPAS industry, the regulation of this high-tech activity has been lagging. No sooner does the Authority develop a legislative framework, than by the time of implementation, the advances in technology have already begun outpacing the legal framework.

This particular aspect of aircraft accident avoidance would have to be considered by the GAARF on a continual basis, with a view to participating in the development of safety measures and risk and hazard mitigation processes.



9.15.2 COMMUNITY RESPONSIBILITY

Adapting regulatory measures to bring about more proportionality in aviation governance will place more responsibility on the GA community.

9.18 OUTPUT – DEVELOP GA FOR GROWTH AND SAFETY

The challenges facing GA present opportunities for social upliftment, though the needs of the community surpass the capacity of the industry.

Developing the youth through GA should be a priority. The focus may well be placed on cultivating both an environment conducive to positive change and on developing the individual. Cadet programmes have yielded mixed results in the past.

Stimulated growth in GA should create sustainable occupational and entrepreneurial opportunities.

Adventure flying activities for reward should be regulated within a suitable regulatory framework that provides for the clear, safe, secure and environmentally-friendly regulation of this activity, and creates a legal pathway to adequately approve, control and oversee all areas of adventure flight operations.

Positive developments in this sector will ensure that better-equipped pilots and technical staff are delivered / supplied into commercial and airline sectors.

9.19 OUTPUT - MEDICAL SUPPORT TO DAMES & PILOTS

Support to both the medical professionals as well as the pilots must be enhanced by developing systems to ensure the integrity of medical assessments on the one hand, and provide mechanisms to pilots to deal with the stressors related to the demands of the cockpit environment on the other.

9.20 OUTPUT – CONSIDER / EVALUATE PILOT AND INSTRUCTOR TRAINING SYSTEM

- Develop a programme for inexperienced pilots to gain experience in preparing them for the commercial and instructional aviation environment.
- Evaluate and explore the concepts of single pilot VFR and IFR and resource management.
- Evaluate and explore the ab-initio PPL requirements, including minimum instrument flying time and recency requirements. Evaluate currency periods and continuous improvement programmes with a view to assisting technical recency.
- Introduce a continuous professional development framework that will will focus on continuous learning and will recognise participation with a credit system.



10. ANNUAL PERFORMANCE PLAN: 5-YEAR TARGETS

Table 1: General Aviation Safety Strategy (GASS) - 5-year Targets

Reference to	Outcome	Output	Year 1		YEA	AR 1		Year 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Outputs			Indicator	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	Output Evidence				
9.1	ARP)	CREATE A DELIVERY VEHICLE	To create a delivery vehicle to coordinate and oversee all output implementations	Plan launch meeting Create TOR for WG and FG	Launch meeting – broad participation (internal & external) TOR for WG and FG first draft.	First meeting of WG E:ASO Approve TOR.	One meeting of WG	E:ASO-approved TOR Launch meeting held	Quarterly and ad- hoc meetings held in accordance with TOR and reports submitted.	Quarterly and ad- hoc meetings held in accordance with TOR and reports submitted.	Quarterly and ad- hoc meetings held in accordance with TOR and reports submitted.	Quarterly and ad-hoc meetings held in accordance with TOR and reports
9.2	GROUP (GA unction)	IMPLEMENT CONTINUOUS PROCESSES	and drive project goals. Monitor and	Identify Participation	Develop indicators to measure impact of outputs.	Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR		Quarterly WG and FG meetings held	Budgets monitored and prepared for the ensuing year.	Budgets monitored and prepared for the ensuing year.	Budgets monitored and prepared for the ensuing year	submitted. Budgets monitored and prepared for
9.2	UCTION eporting f	Evaluation & Feedback	budgetary requirements for output implementation.		goals for outputs.	Report to ExCo on output			first phase (Year 2) of the GASS.		onoung your.	the ensuing year.
9.2A	NT REI	Indicator and Criteria	Delivery vehicle		frequency of Work Group meetings. Schedule meetings	implementation plan.			the first phase (Year 2)			
9.2B	ON ACCIDEI Coordinatior	Co-ordinating / Liaison (internal & external)	report to the E:ASO and the ExCo.		l loi ule FT.							
9.2C	AVIATI entral (Drive Project Goals										
9.3	SENERAL	INTERNAL LIAISON & ENGAGEMENTS										
9.4		EXTERNAL LIAISON & DISCUSSIONS										

Reference to Outputs	Outcome	Output	Year 1 Indicator	YEAR 1				New A	YEAR 2	YEAR 3	YEAR 4	YEAR 5
				OUARTER 1	OUARTER 2	OUARTER 3	OUARTER 4	Year 1 Output Evidence				
		<u>L</u>	<u> </u>		QUANTENZ	QUARTERS	QUARTER	<u></u>			<u> </u>	<u> </u>
9.5		ACCIDENT REDUCTION SEMINARS	Develop framework for GAARS and presenter teams	N/A	N/A	Development of framework with clear deliverables	Finalisation of framework with clear deliverables Initiate item at the WG meeting to establish Focus Group	Framework for GAARS and presenter teams developed Finalise indicat measure impar outputs and pr goals for inclus the TOR. Implement Out via Focus Grou	Framework for GAARS and presenter teams	Framework for GAARS and presenter teams	Framework for GAARS and presenter teams	Host GAARS per approved framework and schedule
9.8		ESTABLISH GAARS PRESENTER TEAMS							Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.			
9.9		OVERSEE / MONITOR GAARS							Implement Output via Focus Group	Continuous Implementation	Continuous Implementation	Continuous Implementatior
9.6	H PROGRAMME	ESTABLISH TREND MONITORING FORUM	Establish the realistic preventible accidents and serious incidents data and analysis plan	N/A	N/A	Initiate item at the WG meeting to establish Focus Group	First meeting of the FG Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Trend monitoring forum established	Periodic meetings and reports	Periodic meetings and reports	Periodic meetings and reports	Periodic meetings and reports
9.11	OUTREAC	CONTINUE SUPPORT FOR SAFETY PRESENTATIONS	N/A	N/A	N/A	N/A	N/A	Form a cohesive support system for external safety campaigns (Year 2 Indicator)	Implement Output Via Focus Group Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Continuous Implementation	Continuous Implementation	Continuous Implementatior
9.13		DEVELOP THE SACAA BRAND	N/A	N/A	N/A	N/A	Initiate item at the WG meeting to establish Focus Group Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Enhance the industry and public perception of the role of the SACAA. (Year 2 Indicator)	Implement Output via Focus Group	Implement Output via Focus Group	Continuous Implementation	Continuous Implementatior
9.10		ESTABLISH PUBLICATIONS	N/A	N/A	N/A	N/A	N/A	Dedicated,	Implement Output via Focus Group	Implement Output via Focus Group	Continuous Implementation	Continuous Implementatior

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Reference to Outputs	Outcome	Output	Year 1 Indicator	YEAR 1				Year 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
				QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	Output Evidence				
								social media platforms				
9.14		ORGANISE NATIONAL AVIATION ACCIDENT REDUCTION WEEK	N/A	N/A	N/A	N/A	Initiate item at the WG meeting to establish Focus Group. Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Arange a wide GA participative conference event. (Year 2 indicator)	Continuous Implementation	Continuous Implementation	Continuous Implementation	Continuous Implementation
9.18		DEVELOP GA FOR GROWTH AND SAFETY	N/A	N/A	N/A	N/A	N/A	A cohesive approach to development in line with the NCAP and NDP (Year 2 indicator)	Implement Output via Focus Group (indicator evidence: draft plan / programme completed) Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Continuous Implementation	Continuous Implementation	Continuous Implementation
9.7	9	DEVELOP EGM	Establish Focus Group to develop educational guidance and professional development framework	N/A	N/A	NA	Initiate item at the WG meeting to establish Focus Group Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Focus Group established	Continuous Implementation	Continuous Implementation	Continuous Implementation	Continuous Implementation
9.20	T AND TRAININ	PILOT / INSTRUCTOR TRAINING SYSTEM										
9.12	.ATORY AMENDMEN SYLLABU\$	SIMPLIFY IR OPS EXAMINATION	N/A	N/A	N/A	N/A	N/A	Re-evaluated applicability and relevance of IR Ops syllabus and update accordingly (Year 3 indicator)	Initiate item at the WG meeting to establish Focus Group Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Implement Output via Focus Group	Continuous Implementation	Continuous Implementation
9.15	REGUL	CREATE FRAMEWORK FOR DEVOLUTION OF POWERS	Establish FG to enhance the relationship with the industry to	N/A	N/A	N/A	Initiate item at the WG meeting to establish Focus Group Finalise indicators to	Focus Group established	Implement Output via Focus Group	Continuous Implementation	Continuous Implementation	Continuous Implementation

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SACAA General Aviation Safety Strategy and Implementation Plan 2020/2021 – 2024/2025

Reference to Outputs	Outcome	Output	Year 1 Indicator	YEAR 1				Year 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
				QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	Output Evidence				
			increase the SACAA footprint				measure impact of outputs and project goals for inclusion in the TOR					
9.16		ESTABLISH RESEARCH PROJECT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Initiate item at the WG meeting to establish Focus Group Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR. (Year 3 indicator)	Implement Output via Focus Group	Continuous Implementation
9.17		REDUCE RPAS THREATS TO GA SAFETY	N/A	N/A	N/A	N/A	N/A	N/A	Initiate item at the WG meeting to establish Focus Group (Year 2 indicator) Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Implement Output via Focus Group	Continuous Implementation	Continuous Implementation
9.19		MEDICAL SUPPORT TO DAMES AND PILOTS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Initiate item at the WG meeting to establish Focus Group (year 3 indicator) Finalise indicators to measure impact of outputs and project goals for inclusion in the TOR.	Implement Output via Focus Group	Continuous Implementation



11. MONITORING AND EVALUATION

Accident and Fatality Rate

A standard of measurement demonstrating improvement in the accident and incident rates, as well as the survivability of accidents and incidents, should be developed and implemented during and following the implementation of the outputs set out above.

Accident Prevention

An accident-prevention data model de monstrating advances in efforts to reduce the rate of accident and incident precursor occurrences as well as the extent of damage. As data and analytics progress, we may be able to attribute our actions to an absence of accidents and incidents.

Progress report, detailing the status of achievement against all targets, will be submitted to ExCo monthly and quarterly to the Board and to the Executive Authority; and to the public through the Annual Report.