TECHNICAL GUIDANCE MATERIAL
for
Private Aerial Work: Towing Operations
(Not offered for reward)

SUBJECT: NON-COMMERCIAL - PRIVATE AERIAL WORK TOWING OPERATIONS TECHNICAL GUIDANCE MATERIAL (SACAR 91.06.4)

EFFECTIVE DATE: 01 December 2025

1. APPLICABILITY

This Technical Guidance Material is applicable to private individuals, companies, a group of companies or any subsidiary thereof by its owners, or an individual or person who is a member or in the employ of such companies intending to conduct non-commercial aerial work operations including banner towing not classified as the provision of an air service, and solely for benefit their own private purposes or in the course of the company, group of companies or any subsidiary thereof normal business activities with their own aircraft, and which is not offered for reward to the public in general.

This Technical Guidance Material excludes natural or juristic persons that operate aircraft, tow or conduct aerial advertising on behalf of another natural person or juristic person for remuneration or reward.

2. PURPOSE

To provide guidance in obtaining written approval for the non-commercial aerial work and towing of objects with aircraft in the republic as provided for in SACAR 91.06.4 “

3. REQUIREMENTS

The South African Civil Aviation Authority recognises the need for non- commercial aerial work and tow operations; however, these operations are required to be conducted with the highest degree of safety possible in the public interest. The SACAA will issue written approval only after confirming that:

3.1. The applicant can consistently demonstrate compliance with the South African Civil Aviation Regulations.
3.2. The Aircraft is registered in the applicant’s name; and
3.3. The applicant meets all requirements specified in the SACAR and this Technica Guidance Material.

4. REFERENCE:

i. SACAR Part 1
ii. SACAR Part 24
iii. SACAR Part 43 & 44
iv. SACAR Part 61 & 62
v. SACAR Part 91 & 94

vi. SACAR Part 174
vii. SACAR Part 185
viii. SACAR Part 187
ix. CAMU Flexible Use of Airspace (FUA) and NOTAMS

5. LIST OF DEFINITIONS AND ABBREVIATIONS USED IN THIS DOCUMENT

5.1. Definitions

TERMINOLOGY	DESCRIPTION
Aeronautical Information Circular	Means circular containing information which does not qualify for the origination of a NOTAM or for inclusion in the AIP issued by the Director in terms of regulation 11.01.2;
Air service	Means an air service as defined in section 1 of the Air Services Licensing Act, 1990 (Act No. 115 of 1990)
Aircraft Flight Manual	Means a manual, associated with the certificate of airworthiness or authority to fly, containing instructions, procedures and limitations within which the aircraft is to be operated and considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft fitted with a tow hook during towing operations.
Approved Banner hook and drop zone Banner Towing	Means accepted by the Director as suitable for a particular purpose Approved or suitable area or location where a banner is hooked or dropped The external carriage and release or recovery of a visual advertisement or message (banner) towed behind an aircraft in flight.
Company	Means a company as defined in section 1 of the Companies Act, 2008
Compliance	Means a state of complying with those requirements mandated through regulation
Flight Manual	Means a manual, attached to the certificate of airworthiness, containing the limitations within which an aircraft is to be considered airworthy, and the instructions and information necessary to the flight crew members for the safe operation of the aircraft
Ground Handling Private Purpose Release mechanism	Means any service, other than air traffic services, required by an aircraft on arrival at, and departure from an aerodrome Not for hire, reward or remuneration, conducted solely for personal or during the company, group of companies or any subsidiary thereof' s normal business activities with their own aircraft for non-commercial purposes. Component that allows the pilot to detach the banner from the aircraft
Remuneration	When used in relation to aircraft operations, means defraying all or part of the costs of the operation whether in cash or in kind and whether or not it is commensurate with the value of the service
Reward	Has the same meaning as "remuneration
The Act	Means the Civil Aviation Act, 2009 (Act No. 13 of 2009)
Tow	means the action of pulling an unmanned object behind an aircraft.
Tow hook	A tow system used to hook, grab or attach a banner to an aircraft

Tow Pilot Rating	Means the rating required by a pilot who intends to act as PIC of an aircraft while towing a banner

5.2. Abbreviations

ABBREVIATION	MEANING
CAMU	Central Airspace Management Unit
CAR	Civil Aviation Regulations
CATS	Civil Aviation Technical Standards
FUA	Flexible Use of Airspace
ICAO	International Civil Aviation Organisation
NPL	National Pilot License
NTCA	Non-type Certified Aircraft
NTCA	Non-type Certified Aircraft
PPL	Private Pilot license
SACAA	South African Civil Aviation Authority
SACAR	South African Civil Aviation Regulations
SACATS	South African Civil Aviation Technical Standards
STC	Supplemental Type Certificate

6. GENERAL

6.1 Aircraft used for towing are equipped by way of an approved STC or modification in the case of NTCA, with special hook and release mechanisms for the purpose.
6.2 Banner towing is a form of aerial advertising that involves the use of aircraft to tow advertising banners, flags, or other lightweight materials through the air.
6.3 Non-commercial towing operations are conducted for personal, promotional, or community purposes.
6.4 The applicant will require appropriately rated pilots, proper aircraft maintenance, and adherence to operational guidelines to ensure the safety of both the crew and the public in general.

7. APPLICATION

7.1 For the Director of Civil Aviation to consider an application for written approval, all listed supporting documentation must be provided. To prevent processing delays, ensure all submitted documentation is complete and accurate.

7.2 The supporting documentation includes:

7.2.1 Application for external load/banner towing form,
7.2.2 Application fee as per SACAR 187.01.48,
7.2.3 Pilot license and ratings copy,
7.2.4 Pilot logbook towing endorsement copy,
7.2.5 Latest company documentation from Companies and Intellectual Property Commission (in the case of a company),

7.2.6 Letter confirming employment of pilot,
7.2.7 Affidavit confirming Towing Operations for non-commercial purposes only,
7.2.8 Aircraft documentation as per SACAR 91.03.1,
7.2.9 Pilot Operating Handbook or Aircraft Flight Manual supplement for Tow Operations, including:

a) Normal and abnormal procedures related to the aircraft towing operations,
b) STC and technical guidelines and procedures,
c) Structural load including weight and balance considerations,

7.2.10 STC or NTCA engineering certificate with technical drawings and modification approval by the SACAA,
7.2.11 Insurance certificate for Tow Operations for non-commercial purpose for any damage or loss that is caused by an aircraft to any person or property on land or water. (Civil Aviation ACT NO. 13 of 2009, Chapter 3, Part 2 (8)),
7.2.12 In the case of a company, proof that the registered aircraft and the detail on the banner is the same,
7.2.13 For an individual, a sample of content to be towed,
7.2.14 Safety risk assessment for a towing operation:

a) Eliminate potential injury or property damage on ground,
b) Maintain regulatory compliance throughout operation,

7.2.15 Operational procedures as prescribed in point 8 below,
7.2.16 Any other additional information, documentation, approval incidental to the intended operations, the aircraft or pilots as required by the SACAA to consider the application.

8. OPERATIONS PROCEDURES

The following documented operational procedures are required in addition to what is contained in the POH/AFM supplement for banner towing, and shall be included as a minimum in the application for written approval:

8.1. <u>General:</u> *A statement of compliance that the applicant shall:*

8.1.1. Comply to all Civil Aviation Regulations and these documented procedures.
8.1.2. Not use the written approval to conduct commercial activities.

8.2. <u>Pre - Flight Procedures</u>

8.2.1. Procedures for Pre-flight briefings and route planning (including emergency sites) – adherence to the usual limitation for flight over built-up area, compliance with the Civil Aviation Regulations.
8.2.2. Procedures for Pickup operations, including clear and designated area only,
8.2.3. Procedures for Banner drop zones: pre-approved, clear of obstacles and persons
8.2.4. Procedures for Prohibited areas: Over or closer than a 2000ft radius of built-up or congested areas, open assemblies of persons, public roads, carparks, public gatherings, public parks, beaches or airports without ATC approval,
8.2.5. Procedures that the operation will only be with one flight crew member,
8.2.6. Procedures that no passenger will be carried during the towing operations,
8.2.7. Procedures for weight and balance calculations,
8.2.8. Procedures for the use of a checklist in pre-flight planning; checklist to include as a minimum consideration for:
   a) Towline connected and locked
   b) Release system tested

c) Banner rolled/stowed or rigged correctly
d) Weight and balance calculated
e) Weather checked
f) Emergency drop area briefed

8.2.9. Procedures to Ensure pilot recency in all towing scenarios

8.3. A description of Aircraft and Equipment Requirements as reflected in the POH/AFM

8.3.1. Aircraft Suitability.
a) Aircraft must be certified or approved by the Director for external load operations or banner towing.
b) Aircraft must have adequate engine power margin, slow-speed handling, and structural tolerance for towing drag.

8.4. A description and details of required Equipment to be used as reflected in the POH/AFM

8.4.1. Tow hitch assembly: Installed and approved as per STC or modification approval by the Director.
8.4.2. Emergency release mechanism: Accessible by pilot, must function under tension.
8.4.3. Hook and grappling system (for pickup operations): If used, must meet safety design standards. Which?

8.5. A description of aircraft Maintenance

8.5.1. Any modifications that were done in accordance with an STC for certified aircraft, or minor modification approval for NTCA.
8.5.2. Maintenance records must reflect:
a) Towing gear inspections
b) Release system function checks
c) Load limitations and wear inspections

8.6. Weather Limitations as per SACAR 91.06.21

8.6.1 Procedures to check and confirm suitable weather conditions and minimums,
8.6.2 Procedures to check and confirm wind limitations for intended towing operations,
8.6.3 Procedures to ensure operations are conducted during VFR conditions only.

8.7. Emergency Procedures

8.7.1. Immediate release of banner in case of:
a) Engine failure,
b) Unexpected drag anomaly,
c) In-flight control degradation.

8.8. Post-Flight

8.8.1. Banner and tow equipment inspection,
8.8.2. Logging of any abnormalities or system faults

8.9. Safety Assurance

8.9.1. Procedures for pre-and post-flight safety briefings
8.9.2. Procedures for periodic proficiency checks
8.9.3. Procedures for ongoing maintenance and inspections of towing gear
8.9.4. Procedures for reporting and documenting of all incidents or near-misses

8.10. Statement of performance limitations

8.10.1. Performance Impact (minimum items addressed in operational procedures)
a) Increase in drag = reduced climb rate and increased stall speed
b) Required take-off distance increases ~25–50%

c) Cruise speed reduction by up to 30%
d) Stall margin significantly reduced; must remain above 1.3x stall speed

8.11. Structural Load Analysis

8.11.1. Aircraft must tolerate banner-induced drag and yaw moments
8.11.2. Tow line tension must not exceed aircraft manufacturer specifications
8.11.3. Approved towline strength: Typically, 1.5x max tow load

8.12. Banner Specifications

8.12.1. Material: Lightweight
8.12.2. Max size: Subject to aircraft performance limitations
8.12.3. Lettering: High contrast and readable at 500m
8.12.4. Must be secure with breakaway sections in case of line failure
8.12.5. Description of what will be advertised on the banner
a) In the case of a company, proof that the registered aircraft and the detail on the banner is the same
b) For an individual, a sample of content to be towed
c) Insert Diagram: Typical Banner Tow Hook Installation if not contained in the POH/AFM supplement

8.13. Conclusion

8.13.1. These documented requirements serve as baseline guidance for SACAA consideration prior to approval and to promote that private aerial work and banner towing is conducted safely and legally.
8.13.2. It remains incumbent on the applicant to set and maintain higher standards where applicable than the guidance set out in this document and to ensure continuous improvement.
8.13.3. SACAA retains the right and duty to request any additional information to promote safety and regulatory compliance.

9. CONDITIONS OF APPROVAL

9.1. This written approval is subject to the authority being satisfied that the towing operations by aircraft can be demonstrated and conducted safely and without endangering persons or property on the ground or in the air.
9.2. The applicant shall ensure that all operations adhere to the highest safety standards and comply with all applicable legislation, regulations as deemed necessary by the South African Civil Aviation Authority with particular emphasis on SACAR 91 Subpart 6 (Division Six).
9.3. The written approval is not indefinite and is subject to the conditions as specified in the written approval.

NOTE

1. The approval will be contingent upon review and consideration of the wording/image, ensuring that it does not violate any rights, trademarks, or promote violence or rudeness.
2. The South African Civil Aviation Authority reserves the right to withdraw, endorse, suspend, downgrade, or vary the written approval as deemed necessary in the interests of aviation safety, security, or if the national interest is compromised.

10. AUTHORISATION

DEVELOPED BY:		
	PIERRE LAUBSCHER	01 December 2025
SIGNATURE OF	NAME IN BLOCK LETTERS	DATE
REVIEWED & VALIDATED BY:		
	NEIL DE LANGE	01 December 2025
SIGNATURE OF SM:	NAME IN BLOCK LETTERS	DATE
APPROVED BY:		
	DEAN KHUMALO	01 December 2025
SIGNATURE OF E:	NAME IN BLOCK LETTERS	DATE

END