



DOCUMENT AE97-12FM

FAA APPROVED AIRPLANE FLIGHT MANUAL SUPPLEMENT  
FOR PIPER MODELS

PA-18 "125", PA-18 "135", PA-18 "150",

PA-18A "135", PA-18A "150"

EQUIPPED WITH

AIRGLAS LW2500 FIXED WHEEL PENETRATION SKI

Registration Number \_\_\_\_\_

Serial Number \_\_\_\_\_

This supplement must be attached to the appropriate CAA or DMCR Approved Airplane Flight Manual listed on page 2 and must be carried in the airplane when the Airglas LW2500 Fixed Wheel Penetration Ski is installed in accordance with STC SA02091AK. The information contained in this document supplements or supersedes the basic manual and applicable appendices only in those areas listed. For limitations, procedures, and performance information not contained in this supplement, consult the basic Airplane Flight Manual.

FAA Approved: James P. Chudy

<sup>FOR</sup>  
Manager, Anchorage Aircraft Certification Office  
Federal Aviation Administration  
Anchorage, Alaska

Date: September 22, 1997

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**Airglas Engineering**  
3500 O'Malley Rd  
Anchorage, AK 99519

**AFM Supplement for Piper**  
**PA-18 "125", PA-18 "135", PA-18 "150"**  
**PA-18A "135", PA-18A "150"**

Ser. # \_\_\_\_\_  
Reg. # \_\_\_\_\_

**Approved Airplane Flight Manuals for Various Models of  
Piper PA-18 Series Airplanes**

<b>No.</b>	<b>Approved Flight Manual (or later approved revision)</b>
1	CAA Approved Flight Manual approved October 20, 1950, for landplanes equipped with Lycoming O-290-D engine.
2	DMCR Approved Airplane Flight Manual dated April 25, 1952, for landplanes or skiplane equipped with Lycoming O-290-D2 engine.
3	DMCR Approved Flight Manual approved October 1, 1954, revised September 28, 1976, for landplanes or skiplanes equipped with Lycoming O-320 engine.

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LOG OF REVISIONS

Revision No.	Pages Affected	Description	FAA Approved	Date
Original	1 - 6			

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### SECTION 1. General

This airplane is equipped with Airglas Engineering Company, Inc., LW2500 Fixed Wheel Penetration Ski. This ski permits operations from hard surfaces and gravel runways as well as snow.

### SECTION II. Limitations

- A.) Airspeeds:  $V_{ne}$  for all models is 138 MPH TIAS.
- B.) Powerplant limits : NO CHANGE
- C.) (1) Markings and Placards :

**DO NOT EXCEED 138 MPH TIAS WITH  
AIRGLAS LW2500 SKIS INSTALLED.**

Place Airspeed Restriction Placard on instrument panel immediately adjacent to Airspeed Indicator and in full view of pilot.

(2)

**ONLY NORMAL CATEGORY OPERATIONS  
APPROVED, SPINS ARE PROHIBITED.**

Place placard on instrument panel in full view of pilot.

- D.) Center of Gravity Limits: NO CHANGE

### SECTION III. Emergency Procedures

- 1. NO CHANGE

### SECTION IV. Normal Procedures

- 1.
  - A.) Pre-flight : Inspect cables and bungees for wear and or missing bolts, cotter keys etc..
  - B.) Starting engine :



**Warning**

Hand propping of engine is not recommended.

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#### SECTION IV. Normal Procedures

- C.) Before landing:



Warning

Ensure planned landing area is free of logs, rocks, snowdrifts or other obstacles.

- D.) Balked landing : NO CHANGE  
E.) After landing : NO CHANGE  
F.) Securing Aircraft : NO CHANGE

#### SECTION V. Performance Information

1. TAKEOFF Under the most favorable conditions of smooth packed snow at temperatures approximating 32°F, the ski-plane takeoff distance is approximately 30 percent greater than that shown for the land plane.



Warning

In estimating distances for other conditions, caution should be exercised in that other temperatures or other snow conditions may significantly increase these distances.

2. CLIMB Rate of climb performance is decreased approximately 26% over climb performance with eight inch (8") tires.
3. CRUISE Cruise speed may be decreased as much as 3%. Maximum range will also be reduced.
4. LANDING Under the most favorable conditions of smooth packed snow at temperatures approximating 32°F, the ski-plane landing distance is approximately 20 percent greater than that shown for the land plane on a hard surface.

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## SECTION V. Performance Information

### 4. LANDING



Warning

In estimating distances for other conditions, caution should be exercised in that other temperatures or other snow conditions may **significantly** increase these distances.

## SECTION VI. Weight and Balance/Equipment List

The equipment added to this airplane by this modification consists of the LW2500 Fixed Penetration Wheel ski kit. The weight of the wheel ski kit is 90 lbs at an arm of 0.5 inches (aft of the wing leading edge). See the airplane's current weight and balance report for exact weight and balance information.

## SECTION VII. Systems Descriptions

This airplane is equipped with an Airglas Engineering Company, Inc., LW2500 Fixed Wheel Penetration Ski, with associated attachment rigging.

## SECTION VIII. Handling, Servicing and Maintenance

All handling procedures for this modification are standard. The LW2500 Fixed Wheel Penetration Ski may be serviced and maintained in accordance with Part 43 of the Federal Aviation Regulations (FAR 43). Servicing and maintenance in accordance with FAR 43 is adequate to insure the continued airworthiness of this modification. Information on installing the LW2500 Fixed Wheel Penetration can be found in the Installation Manual for Airglas LW2500 Wheel ski, Airglas Manual No LW2500-105, dated April 2, 1997, or later FAA approved revision. The installation information in Manual No. LW2500-105 is also useful when removing the wheel skis for servicing, maintenance, or repair.