

SECTION 9**Pilot's Operating Handbook Supplement AST-02****Increase of permissible Gross Weight**

to

800kg

If required by application of this POH supplement the AQUILA AT01-200 can be operated with an increased permissible gross weight of 800kg. Therefore this supplement must be inserted into Section 9 of the Pilot's Operating Handbook.

The information in this supplement adds to or replaces information in the basic POH.

The technical content of this document is approved under the authority of the DOA ref.
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0.1 RECORD OF REVISIONS

Issue	Reason for Change	Effectuated Pages	Date of Issue
A.01	Initial Issue	All	21.12.2021

0.2 LIST OF CURRENT PAGES

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0.3 Table of Contents

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1. GENERAL

1.1. Introduction

This supplement describes the influence on the AQUILA AT01-200 when operated with a permissible total mass increased from 1653 lbs (750 kg) to 1764 lbs (800 kg). There are no significant changes in aircraft control or stability with the 111 lbs (50kg) increase. Only those parts of the Flight Manual affected by the mass increase are included here.

1.10 WEIGHTS

Maximum Takeoff Weight (MTOW):	1764 lb.	(800 kg)
Maximum Landing Weight (MLW):	1764 lb.	(800 kg)
Empty Weight (MZFW):	Refer to section 6	
Max. Weight in Baggage Compartment:	88.2 lb.	(40 kg)
(All baggage must be adequately strapped and secured)		
Max. Wing Loading:	15.6 lb./ft ²	(76.2 kg/m ²)
Min. Wing Loading:	ca. 11.6 lb./ft ²	(56.5 kg/m ²)

2. OPERATING LIMITATIONS

2.3 AIRSPEED INDICATOR MARKINGS

The airspeeds given below are expressed in Indicated Airspeeds (IAS):

Marking (IAS)	[kts]	Remarks
White arc	40-90	Full flap operating range
Green arc	51-130	Normal operating range
Yellow arc	130-165	Operations in this region must be conducted with caution and only in smooth air.
Red line	165	Maximum speed for all operations.

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2.6 WEIGHT LIMITS

Maximum Takeoff Weight	1764 lb	(800 kg)
Maximum Landing Weight	1764 lb	(800 kg)
Max. Weight in Baggage Compartment	88.2 lb	(40 kg)

WARNING

Exceeding the weight limits can overload the aircraft and is prohibited. In addition, aircraft performance and handling characteristics may be detrimentally affected. The stall speed will increase, so that the instrument markings are no longer accurate.

NOTE

If national regulations define the beginning of a flight by starting the engine, a "ramp mass" of at maximum 3 kg above the maximum take-off mass is permitted. However, at the time of take-off, the maximum allowable take-off mass must not be exceeded.

3. EMERGENCY PROCEDURES

No change to the basic POH.

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4. NORMAL PROCEDURES

4.2 AIRSPEEDS FOR NORMAL OPERATION

The following airspeeds are based on the maximum take-off weight of 1764 lbs (800 kg). They may also be used for any lower operational weight.

TAKE-OFF		
Airspeed (IAS)		kts
Normal climb speed to 50 Feet (Flaps T/O)		60
Best rate of climb speed at sea level (Flaps UP)	V_Y	66
Best angle of climb speed at sea level (Flaps T/O)	V_X	55

LANDING		
Airspeed (IAS)		kts
Final approach speed for landing (Flaps LDG)		60
Balked landing (Flaps LDG)		62
Maximum demonstrated crosswind component for take-off or landing		15
Maximum airspeed with Flaps LDG	V_{FE}	90

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5. PERFORMANCE

The performance charts of the basic POH are already valid up to 1764 lbs (800 kg).

5.2.2 Stall Speeds

Stall speeds for flight masses between 1653 lbs (750 kg) and 1764 lbs (800 kg):

Flap Position	Bank Angle				
	0°		30°	45°	60°
	KCAS	KIAS	KIAS	KIAS	KIAS
UP	58	51	55	61	> 72
T/O	52	46	49	55	> 65
LDG	45	40	43	48	> 58

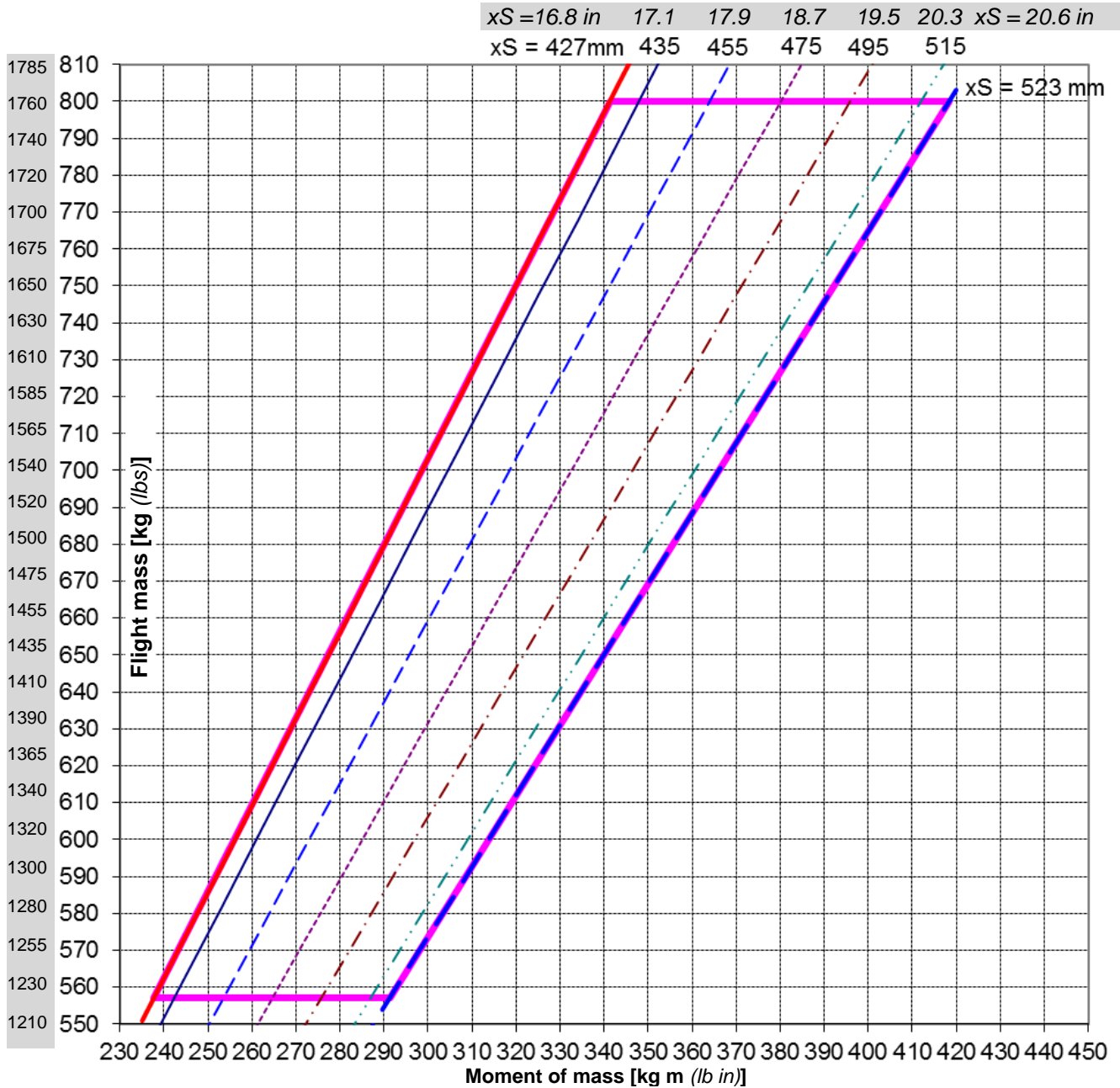
5.3 NOISE CHARACTERISTICS / ABATEMENT

Certification basis	Actual (MTOW: 800kg / 1764 lbs)	Maximum Allowable
CS-36, Amendment 5	65.2 dB(A)	75.3 dB(A)
ICAO Annex 16, Chapter 10	65.2 dB(A)	75.3 dB(A)

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6. WEIGHT AND BALANCE

6.4.3 Approved Center of Gravity Range and Moment Limits



7. SYSTEM DESCRIPTION

No change to the basic POH.

8. HANDLING, SERVICE AND MAINTENANCE

No change to the basic POH.

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