



FAA APPROVED
AIRPLANE FLIGHT MANUAL SUPPLEMENT

FM 1056

**Cessna Model 414
Modified In Accordance With
STC SA4379SW-D
Installation of Series IV Engines and
McCauley Model No. C93,
C505, C515 or Hartzell
Model No. DB-2Q or D-2Q Propellers**

AIRCRAFT MODEL NO. 414


SERIAL NO. 0385

REGISTRATION NO. N727 RP

*Sample Copy to
Albert Nixon
9/6/2018*

This supplement is FAA approved and must be attached to the FAA-approved Airplane Flight Manual when the aircraft has been modified in accordance with RAM Aircraft L.P. STC SA4379SW-D. The information contained in this document supplements or supersedes the Airplane Flight Manual only in those areas listed herein. For limitations, procedures, and performance not contained in this supplement, consult the Airplane Flight Manual.

F.A.A. Approved


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Date: JUN 11 2008



FLIGHT MANUAL SUPPLEMENT

MAXIMUM CERTIFICATED WEIGHTS

Ramp Weight:	6550 lbs.
Maximum Takeoff Weight	6510 lbs.
Maximum Landing Weight	6200 lbs.
Maximum Zero-Fuel Weight	6165 lbs.

CENTER OF GRAVITY LIMITATIONS

Aft Limit: 159.59 inches aft of datum at 6510 lbs.; 160.2 inches aft of datum at 5950 lbs. or less with straight line variation in between these points.

Forward Limit: 151.3 inches aft of datum at 6510 lbs.; 147.49 inches aft of datum at 5000 lbs. or less with a straight line variation in between these points.

ENGINE INSTRUMENT MARKINGS

Definition of Limit	Minimum Operating	Normal Operating Range	Preferred Operating Range	Caution Range	Maximum Operating
Marking Description	Red Radial	Green Arc	Wide Green Arc	Yellow Arc	Red Radial
Tachometer	---	2100-2700 rpm	---	---	2700 rpm
Manifold Pressure Gage (Series III Engine)	---	17.0 - 35.0* in. Hg	---	---	40.0* in. Hg
Manifold Pressure Gage (Series IV Engine)	---	17.0 - 35.0* in. Hg	---	---	41.0* in. Hg
Cylinder Head Temp. Gage	200°F	200°F - 320°F 400°F - 460°F	320°F - 400°F	---	460°F
Oil Temp Gage	75°F	75°F - 140°F 190°F - 240°F	140°F - 190°F	---	240°F
Exhaust Gas Temp Gage	---	1300°F - 1550°F	---	1550°F-1650°F	1650°F

*NOTE: If American Aviation Intercooler System is installed per STC SA4956NM:

Manifold pressure for top of GREEN ARC is 33.0 In. Hg. The bottom of GREEN ARC (17.0 In. Hg.) does not change.
RED LINE manifold pressure is 38.0 In. Hg. with Series III engine and 39.0 In. Hg. with Series IV engine.



FLIGHT MANUAL SUPPLEMENT

SECTION 5 – PERFORMANCE

The following performance items are unchanged from the original aircraft:

Airspeed Calibration - Normal Static Source
 Airspeed Calibration - Alternate Static Source
 Altimeter Correction - Normal Static Source
 Altimeter Correction - Alternate Static Source
 Normal Takeoff Distance
 Accelerate-Stop Distance
 Accelerate-Go Distance
 Rate-of-Climb - Single Engine
 Rate-of-Climb - Balked Landing Climb
 Normal Landing Distance

The following performance items apply to the RAM modified aircraft operated at 6510 lbs. For performance at weights of 6350 lbs. and below, see the original Airplane Flight Manual.

STALL SPEEDS

For Aircraft Serial Numbers 414-001 thru 414-0450

Weight (lbs.)	Configuration		Bank Angle			
			0	20	40	60
	Flaps	Gear	MPH CAS	MPH CAS	MPH CAS	MPH CAS
6510	Up	Up	98	101	112	139
	15°F	Down	93	96	106	132
	45°F	Down	82	85	94	116
NOTE: For stall speeds at and below 6350 lbs., see the original Pilot's Operating Handbook/AFM						

For Aircraft Serial Numbers 414-0451 thru 414-0800

Weight (lbs.)	Configuration		Bank Angle			
			0	20	40	60
	Flaps	Gear	KCAS	KCAS	KCAS	KCAS
6510	Up	Up	85	88	97	120
	15°F	Down	81	84	93	115
	45°F	Down	71	73	81	101
NOTE: For stall speeds at and below 6350 lbs., see the original Pilot's Operating Handbook/AFM						