Arapahoe Flight Club Operations Manual

18 July, 2021

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1 General

1.1 Membership

Membership at Arapahoe Flight Club gives you access to club aircraft as well as the club facilities. We want to promote an "aircraft ownership experience" and members have a lot of autonomy however, this access comes with responsibilities and some restrictions. It is important for all club members follow the guidance in this Operations Manual. Failure to follow these guidelines, may result in disciplinary actions to include dismissal from the club

1.2 Dues

Members are required to pay an annual insurance fee of $100 to add you to the Club's insurance policy. This policy covers you while you fly on the Club's aircraft only. Also, the member is responsible for a monthly membership due of $30.

1.3 Outstanding Balances

Members are restricted from scheduling aircraft if there is an outstanding balance in your account. Any outstanding balances for an extended period of time can result in membership cancellation and sent to a collection agency.

1.4 Membership Cancellations

Membership cancellations should be done in writing by sending an email to the club president at diego.blandon@arapahoefc.com or yasmine.janssen@arapahoefc.com.

2 Rules of Conduct

2.1 Safety

Safety is the foremost consideration for all operations. Safety preempts all other competing factors in decision making (schedule, training objectives, completion of flight, etc.) and will be controlling for each PIC as required by §91.3.

Maintaining a safe operation is the responsibility of all club members. To that end, members are requested to assist one another whenever possible. For example:

- Wing-walking aircraft in and out of hangars
- Sharing real-time information about airport and flight conditions
- Questioning any observed operation in which safety is compromised

NOTE

Every member has the authority to intervene in an operation they feel may be unsafe, whether they are directly involved or not. The safety concern will be evaluated by all involved before the operation is continued. Please find an instructor if help is needed to reach a solution.

2.2 Respect

Respect is an essential foundation to the culture of the club and all members are expected to uphold a high standard of conduct. Members are encouraged to promote a positive atmosphere within the club; sharing experiences, celebrating successes, and enjoying aviation together.
Members must ensure that their interactions with other members demonstrate respect at all times. Conduct towards a member or guest deemed to be derogatory, discriminatory, or harassing will not be tolerated and will result in club discipline.

2.3 Security

Security awareness is everyone's responsibility. Ongoing threats to the country by its adversaries also pose a potential risk to U.S. airports. Therefore, it is imperative everyone remain vigilant to proper security protocol and procedures. Members must, at all times, remain observant to all activities going on around them and be ready to report suspicious activity to the proper authorities.

Members must comply with all Federal and local regulations regarding access to the Airport Operations Area (AOA).

Airport badges must be displayed visibly at all times while on the AOA. Regulations allow for a badged member to escort up to five (5) individuals without badges. While escorting non-badged individuals, the badged member maintains responsibility for them and must keep them in his or her line of sight.

When entering or exiting the AOA by vehicle, the gate must completely close before the vehicle moves beyond blocking the entrance.

CAUTION

Do not permit non-badged individuals to 'piggy back' through security gates or into the 5-Star building unless they are positively identified and under escort. Do not allow non-badged individuals access to Arapahoe hangars or aircraft. Contact club or 5-Star management to reconcile the presence of non-badged individuals. Arapahoe FC (719) 375-0634. 5-Star (719) 374-5943.

2.4 Alcohol/Controlled Substances

While §91.17 prescribes limitations on alcohol and drugs for aircraft crewmembers, club policy will be considered zero-tolerance.

No one under the influence or suffering the effects of alcohol or a drug not authorized by the FAA will occupy a control seat in a club aircraft. This applies to member PIC flights as well as to dual training flights.

Alcohol in open containers and Schedule I controlled substances will not be transported in club aircraft.

3 Scheduling

3.1 Aircraft Reservations

Aircraft reservations are managed through the Flight Schedule Pro website and mobile app. Club aircraft are a shared resource and members should be courteous to each other in utilizing the aircraft schedule. For example:

- Local training flights are typically reserved for two-hour blocks
- When scheduling, attempt to minimize unusable blocks of time between other reservations (e.g. 0900-1100, 1200-1400 leaves an unusable hour between flights)
- Cancel a flight you do not intend to use as early as possible to allow rescheduling of the aircraft
- Arrive back to the club in a timely manner for the aircraft to be fueled and ready for the next reservation
- Make every effort to notify members with a reservation after yours if:
  - You will be returning late
  - The aircraft will be out of service for a maintenance discrepancy following your flight
- Utilize Flight Scheduler Pro to check out the aircraft and promptly complete the check-in process upon return so the aircraft can be checked out on the next reservation

FAA checkrides will take scheduling priority over all other activities.

Aircraft reservations longer than 4 hours or overnight stays require coordination with overall scheduling demand and authorization from the club.

3.2 Remain Over Night (RON) Reservations

Aircraft reservations that require the aircraft to remain over night outside of Arapahoe Flight Club facilities require previous approval from the Club. Every attempt should be made to have the aircraft hangared and secured. If hangar space is not available, the aircraft should be tied, locked and secured. An average of ***2 daily flight hours*** will be required for these reservations.

4 Maintenance

4.1 Maintenance Status

The maintenance status of club aircraft is tracked through the Flight Schedule Pro website. Inspection due dates/tach times are viewable under the aircraft link, Description tab and the airworthiness of the aircraft shall be verified by members when checking the aircraft out. Open as well as closed discrepancies are also viewable under the aircraft link.

4.2 Discrepancy Reporting

When a maintenance defect is discovered, a discrepancy will be opened in Flight Schedule Pro under the aircraft resource link. When opening a discrepancy, be as descriptive as possible, including frequency (e.g. occasional, intermittent, constant) and conditions (e.g. in flight, while transmitting, with flaps extended) to aid in the diagnosis and repair of the defect.

NOTE

After opening a discrepancy, contact club A&P Robert Pickett at (256) 797-9770 via voice or text. Reference the aircraft tail number and provide a brief description of the defect.

Robert Pickett is the club's A&P mechanic and is generally available on site M-F 0900-1500. Outside of those hours he may still be contacted regarding maintenance issues or questions.

When reporting a discrepancy that will place the aircraft out of service for subsequent flight(s), attempt should be made to contact the member(s) holding the subsequent reservation(s).

4.3 Discrepancies Reported Away from COS

If a discrepancy is encountered enroute to or while at an airport other that COS, contact **Arapahoe Flying Club (719) 375-0634**, **Robert Pickett (256) 797-9770**, or **Diego Blandon (719) 301-6550** for coordination of repair or deferral.

4.4 Dispatch with Inoperative Instruments or Equipment

Club aircraft may be operated with inoperative instrumentation or equipment under the provisions of §91.213(d).

CAUTION

Inoperative instrumentation or equipment allowable for operation under §91.213 must be removed or deactivated and placarded "INOPERATIVE". A determination must be made that the inoperative instrument or equipment does not constitute a hazard to the aircraft (§91.213(d)(3-4)).

5 Flight Operations

5.1 Dispatch Requirements

All flight operations, flight scheduling, and customer billing processes shall use the Flight Schedule Pro (FSP) software. Issues with the software shall be brought to the attention of club staff. The FSP software also has a help desk number available at: 866-391-8324 or by the following URL: https://www.flightschedulepro.com/contact-us.

Prior to departing on any flight, all aircraft shall be property dispatched using the FSP software. The route of flight (e.g. KCOS to KFLY or "training area") shall be entered into the dispatch record.

5.1.1 Certificate and Document Requirements

The following documents must be carried onboard club flights:

- Pilot and instructor certificates as appropriate
- Current medical certificate
- Airport Badge
- Logbook and required endorsements for student solos

5.2 Preflight Action

All club flights will be operated in accordance with the provisions of §91.103 with respect to familiarization of weather reports and forecasts and determination of take-off and landing distances and runway lengths available. Weight and Balance will be determined to be within the aircraft's center of gravity envelope prior to every flight. Weight and balance determination may be accomplished with the worksheets located in the aircraft POH or with the pre-calculated tables provided, or through electronic means such as ForeFlight.

Preflight Inspections – Members are required to perform thorough preflight inspections. Ensure to annotate any aircraft damage found during the preflight inspection using Flight Schedule Pro. This will prevent any member getting charged for aircraft damage done by a previous flight.

CAUTION

Weather conditions at and around COS tend to be erratic. Actual conditions frequently vary from the Terminal Area Forecast (TAF) conditions, particularly with regard to wind speed and direction.

5.3 Ground Operations

The ramp areas around 5-Star Aviation are uncontrolled and are often busy with non-club traffic. Caution must be utilized while walking, driving, or taxing to see and avoid moving aircraft, propellers, vehicles or pedestrians.

Taxi at a speed that allows an immediate stop to be made safely while on ramp areas, particularly around the blind corners.

While walking on the ramp at night, operate a flashlight to remain visible to aircraft.

If the aircraft is to stay out of the hangar for an extended period of time, greater than 1 hour, the aircraft should be parked in the back row to avoid taking up guest parking.

Figure 1 - Back Row

Aircraft will never be left out overnight. If there are issues bringing the aircraft into the hangar, Club staff should be informed immediately.

Aircraft movement can be done using the golf cart available at the club however, a member must be checked out on the golf cart operations prior to towing using the golf cart. Additionally, when moving an aircraft, especially in and out of the hangar where space is restricted, make sure to have wing walkers to clear your movement. Ask for help from other members, staff (Five Star or Arapahoe) or anyone on the ramp.

5.4 Authorized Airports

Airports utilized by club aircraft will have no less than 200% of the computed takeoff distance required available on a hard surface runway.

Requests for exceptions to this policy or operations on other than hard surfaces must receive prior authorization by the club owner.

Bullseye (CO90) is a military auxiliary field and is not authorized for club operations. KFLY is authorized for operations on runways 15-33. Springs East (CO4) is approved for operations on runway 17R-35L and with the club owners permission runway 8-26 and 17L-35R.

5.5 Operations in Mountainous Areas

Club aircraft will not be operated in or over mountainous areas as defined by terrain above 8,500’ MSL unless the member has received mountain training and a club mountain checkout and is flying an aircraft designated for mountain flying by the club.

5.6 Weather Requirements

5.6.1 Density Altitude

Takeoff is not authorized in club Piper aircraft when the density altitude exceeds 10,000’ MSL at the field.

5.6.2 Windshear and Microbursts

Takeoff and landing operations will cease when reports of windshear in excess of 20 kts. or microburst conditions exist for the intended runway. The presence of these conditions are indicated by any combination of ATC alerts, reports from other aircraft, or direct observation by the pilot. Such conditions are usually transient in nature and even a relatively short delay can allow conditions to pass. Consider returning to the practice area temporarily or diversion to Meadowlake (KFLY) or Pueblo (KPUB) if conditions at KCOS remain unsuitable.

5.6.3 Wind Limitations

Takeoff and landing operations will cease when reported winds for the runway in use exceed 30 kts. This does not prevent landing on a dual training flight when it is deemed the safest course of action by the instructor.

5.6.4 Runway, Taxiway, and Ramp Conditions

Club operations will not be conducted on surfaces with braking action reported less than 'fair' or FICON less than 3-3-3.

5.6.5 Inclement Weather

If strong wind gusts or hail are possible in the COS area, aircraft must not be left on the ramp and shall be returned to the hangars after use. When severe weather is imminently approaching the field, all club members present are requested to assist with expeditiously returning the aircraft into the hangars.

CAUTION

Before leaving the airport, do your best to verify with the next reservation that the member will still come and fly. Inclement weather may result in the subsequent reservation also getting cancelled. 'If in doubt, don't leave it out!'

5.6.6 Thunderstorms

All thunderstorms should be avoided at all distances that permit safe operation of aircraft. A distance of 20nm shall be maintained away from all reported severe thunderstorms.

5.6.7 Instrument Meteorological Conditions

Club aircraft shall not depart any airport into IMC conditions if the current ceiling and visibility do not allow for an immediate return to the airport of departure. If departing into IMC conditions, the airport approach weather minimums at takeoff must be at least the lowest for an operating approach (permitted for that aircraft) to be executed upon return to the airport.

Single pilot operations at night in IMC is not permitted in club aircraft.

5.6.7 Known Icing Conditions

None of the Arapahoe club aircraft are certified for flight into known icing conditions. As such, areas of forecast or reported icing or areas of visible moisture or precipitation accompanied by temperatures aloft below 10ºC must be avoided or exited immediately if inadvertently encountered.

5.6.8 Student Pilot Solo Weather Minima

Instructors will determine and record weather limitations for student solos appropriate to the student's experience level and proficiency demonstrated. 20 kts. total wind with a 10 kt. crosswind component will be considered the maximum limitations used for club student solos. The maximum gust factor for any club student shall be 10 kts. The following weather restrictions apply to club student solo flights:

Local pattern flights shall have weather at least:

- 1500 ft AGL ceiling (supervised)
- 2000 ft AGL ceiling (unsupervised)
- 5 sm visibility
- 10 kts maximum crosswind

Local solo flights (within 25 nm) shall have weather at least:

- 2500 ft AGL ceiling
- 7 sm visibility
- 10 kts maximum crosswind

Cross country solo flights shall have weather at least:

- 3000 ft AGL ceiling
- 10 sm visibility
- 10 kts maximum crosswind for runways of intended landing

5.7 Cold Weather Operations

5.7.1 Hangar Heat

The heat in club hangars will be left on when temperatures are or forecast to fall below freezing. If it is necessary to have the hangar doors open for a period greater than fifteen (15) minutes, the heat must be selected off at the breaker box while the doors are open, and then back to on when the doors are closed.

5.7.2 Aircraft Hangaring Policy

When the outside temperature is or forecasted to be below freezing, ***aircraft will be returned to heated hangar storage after use unless they are scheduled for another flight in less than one hour***. This is to increase dispatch reliability by preventing cold soaking of aircraft.

CAUTION

Before leaving the airport, do your best to verify with the next reservation that the member will still come and fly. Inclement weather may result in the subsequent reservation also getting cancelled. 'If in doubt, don't leave it out!'

5.7.3 Recommended Safety Equipment

During operations in low temperatures, members should carry adequate cold weather outerwear onboard the aircraft to allow for sufficient protection should a forced landing occur in a

remote location. At a minimum, a winter jacket, gloves, and a winter hat should be onboard for each occupant of the aircraft.

5.8 Local Area Operations

5.8.1 Practice Areas

For training purposes, the East Practice Area is considered to be an area within the COS TRACON radar service area east of the COS Class C airspace bound by a 25 NM arc from the COS airport. Beyond this approximate range, Springs Approach will advise leaving their airspace and terminate radar services. Requesting frequency change and termination of radar services is necessary before practicing landings at a satellite airport.

Aside from general aviation traffic, there are also extensive military training operations in the East Practice Area based out of Pueblo and the Air Force Academy. Club policy is to utilize all available means of traffic avoidance including ATC traffic advisories and onboard ADS-B traffic information as available.

5.8.2 Aircraft Fueling at COS

Arapahoe has a contracted purchase agreement for fuel with Cutter Aviation which helps keep rental prices low. Fuel from Cutter may be requested on taxi-in on frequency 131.0 or by phone at (719) 591-2065.

Following a flight, the fuel used during the flight should be replaced. The Piper fleet is fueled to tabs (34 gallons usable). The Diamond DA-40 is refueled by the 'Fuel Used' indication on the Garmin 1000, and then reset to 0, typically around 34 gallons. If additional fuel is required for a cross-country flight, members may contact the preceding crew to request a specific fuel load when they refuel.

If you return after Cutter Aviation business hours, refueling will be deferred until the next day as there are extra fees involved for after-hours service. On the first flight of the day, check actual fuel on board early to allow time for service if more fuel is required.

5.9 Other Than Local Operations

5.9.1 Flight Plans and VFR Flight Following

For flights outside of the 25 mile radius COS local area, the club recommends utilizing VFR flight following with ATC when available. VFR flight plans are also encouraged, especially along routes where radar coverage may not allow for flight following at the planned altitude.

5.9.2 Fuel Planning

VFR club flights shall be operated at a minimum in accordance with the requirements of §91.151 but a greater fuel reserve margin is prudent in most cases.

Fuel may be purchased at airports other than COS and receipts will be reimbursed by the club at the club rate at the COS airport, contact club staff for the latest fuel prices.

5.9.3 Equipment for Out-of-Area Operations

Flights landing at destinations other than COS should carry an extra quart of oil on board the aircraft in case additional oil is required at a downline preflight.

When an aircraft will be left unattended on the ramp at an airport other than COS, 3-point tie downs and chocks must be carried onboard the aircraft and utilized while the aircraft is left unattended

6. Insurance Requirements

The club currently does not require members to carry their own renters insurance. The club has its own policy that each member buys into at the beginning of their membership. However, it is highly encouraged each member carry their own renters insurance.

Because of the recent rash of accidents caused by members' complacency and not following the SOP, the club may require in the future each member to carry their own individual insurance in addition to the club policy.

It is HIGHLY encouraged that each member carry their own renter's insurance policy.

A MEMBER WILL BE FINANCIALLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED AS A RESULT OF NOT FOLLOWING THIS SOP AND OR STANDARD PRACTICES

Piper PA28-180 N4882L

Canned Weight & Balance

Assumes Empty Rear Seats and Cargo Compartment, Fuel at tabs

Empty Weight	Front Seat Combined	Fuel (34 gallons)	Takeoff Weight	Takeoff Moment	Takeoff CG
1387.7	100	**204**	1691.7	145,746	86.15
	120		1711.7	147,456	86.15
	140		1731.7	149,166	86.14
	160		1751.7	150,876	86.13
	180		1771.7	152,586	86.12
	200		1791.7	154,296	86.12
	220		1811.7	156,006	86.11
	240		1831.7	157,716	86.10
	260		1851.7	159,426	86.10
	280		1871.7	161,136	86.09
	300		1891.7	162,846	86.08
	320		1911.7	164,556	86.08
	340		1931.7	166,266	86.07
	360		1951.7	167,976	86.07
	380		1971.7	169,686	86.06
	400		1991.7	171,396	86.05
	420		2011.7	173,106	86.05
	440		2031.7	174,816	86.04
	460		2051.7	176,526	86.04

Piper PA28-151 N831TS

Canned Weight & Balance

Assumes Empty Rear Seats and Cargo Compartment, Fuel at tabs

Empty Weight	Front Seat Combined	Fuel (34 gallons)	Takeoff Weight	Takeoff Moment	Takeoff CG
1455.3	100	**204**	1759.3	154,890	88.04
	120		1779.3	156,600	88.01
	140		1799.3	158,310	87.98
	160		1819.3	160,020	87.96
	180		1839.3	161,730	87.93
	200		1859.3	163,440	87.90
	220		1879.3	165,150	87.88
	240		1899.3	166,860	87.85
	260		1919.3	168,570	87.83
	280		1939.3	170,280	87.81
	300		1959.3	171,990	87.78
	320		1979.3	173,700	87.76
	340		1999.3	175,410	87.74
	360		2019.3	177,120	87.71
	380		2039.3	178,830	87.69
	400		2059.3	180,540	87.67
	420		2079.3	182,250	87.65
	440		2099.3	183,960	87.63
	460		2119.3	185,670	87.61

Piper PA28-180 N8314W

Canned Weight & Balance

Assumes Empty Rear Seats and Cargo Compartment, Fuel at tabs

Empty Weight	Front Seat Combined	Fuel (34 gallons)	Takeoff Weight	Takeoff Moment	Takeoff CG
1379.0	100	**204**	1683.0	145,517	86.46
	120		1703.0	147,227	86.45
	140		1723.0	148,937	86.44
	160		1743.0	150,647	86.43
	180		1763.0	152,357	86.42
	200		1783.0	154,067	86.41
	220		1803.0	155,777	86.40
	240		1823.0	157,487	86.39
	260		1843.0	159,197	86.38
	280		1863.0	160,907	86.37
	300		1883.0	162,617	86.36
	320		1903.0	164,327	86.35
	340		1923.0	166,037	86.34
	360		1943.0	167,747	86.33
	380		1963.0	169,457	86.33
	400		1983.0	171,167	86.32
	420		2003.0	172,877	86.31
	440		2023.0	174,587	86.30
	460		2043.0	176,297	86.29

Diamond DA-40 N405MA

Canned Weight & Balance

Assumes Empty Rear Seats and Cargo Compartment, Fuel at tabs

Empty Weight	Front Seat Combined	Fuel (34 gallons)	Takeoff Weight	Takeoff Moment	Takeoff CG
1707.4	100	**204**	2011.4	194,957	96.93
	120		2031.4	196,769	96.86
	140		2051.4	198,581	96.80
	160		2071.4	200,393	96.74
	180		2091.4	202,205	96.68
	200		2111.4	204,017	96.63
	220		2131.4	205,829	96.57
	240		2151.4	207,641	96.51
	260		2171.4	209,453	96.46
	280		2191.4	211,265	96.41
	300		2211.4	213,077	96.35
	320		2231.4	214,889	96.30
	340		2251.4	216,701	96.25
	360		2271.4	218,513	96.20
	380		2291.4	220,325	96.15
	400		2311.4	222,137	96.10
	420		2331.4	223,949	96.06
	440		2351.4	225,761	96.01
	460		2371.4	227,573	95.96

Piper PA28-180 N3939X

Canned Weight & Balance

Assumes Empty Rear Seats and Cargo Compartment, Fuel at tabs

Empty Weight	Front Seat Combined	Fuel (34 gallons)	Takeoff Weight	Takeoff Moment	Takeoff CG
1506.0	100	**204**	1810.0	155,865	86.11
	120		1830.0	157,575	86.11
	140		1850.0	159,285	86.10
	160		1870.0	160,995	86.09
	180		1890.0	162,705	86.09
	200		1910.0	164,415	86.08
	220		1930.0	166,125	86.07
	240		1950.0	167,835	86.07
	260		1970.0	169,545	86.06
	280		1990.0	171,255	86.06
	300		2010.0	172,965	86.05
	320		2030.0	174,675	86.05
	340		2050.0	176,385	86.04
	360		2070.0	178,095	86.04
	380		2090.0	179,805	86.03
	400		2110.0	181,515	86.03
	420		2130.0	183,225	86.02
	440		2150.0	184,935	86.02
	460		2170.0	186,645	86.01

Piper PA28-180 N3600R

Canned Weight & Balance

Assumes Empty Rear Seats and Cargo Compartment, Fuel at tabs

Empty Weight	Front Seat Combined	Fuel (34 gallons)	Takeoff Weight	Takeoff Moment	Takeoff CG
1407.00	100	**204**	1711.0	149,242	87.22
	120		1731.0	150,952	87.20
	140		1751.0	152,662	87.19
	160		1771.0	154,372	87.17
	180		1791.0	156,082	87.15
	200		1811.0	157,792	87.13
	220		1831.0	159,502	87.11
	240		1851.0	161,212	87.09
	260		1871.0	162,922	87.08
	280		1891.0	164,632	87.06
	300		1911.0	166,342	87.04
	320		1931.0	168,052	87.03
	340		1951.0	169,762	87.01
	360		1971.0	171,472	87.00
	380		1991.0	173,182	86.98
	400		2011.0	174,892	86.97
	420		2031.0	176,602	86.95
	440		2051.0	178,312	86.94
	460		2071.0	180,022	86.92