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V1.0

Maintenance, Repo, and Charter Guide

ALLEGIANT VIRTUAL
FLIGHT OPERATIONS

Change Guide	
Date	Changes
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Table of Contents	
Introduction	1
Maintenance Flight Procedures	2
Repositioning Flight Procedures	5
Charter Operations	7
International/Class II Operations	13

INTRODUCTION

Crews,

This manual serves to guide crews through the operations of Maintenance, Repositioning, and Charter operations. To provide and create a more realistic experience, Allegiant Virtual will begin simulating and encouraging these flights that mirror real world operations. This will provide our pilots with a wider variety of flights to different airports that we ordinarily would not be able to fly to. Adherence to this manual is not required for operation, however it is highly recommended to assist in all aspects of this unique flying.

All information within this manual was created using flightaware.com to track tail numbers, and public use information. This manual is the sole intellectual property of Allegiant Virtual and shall not be shared with anyone outside of the virtual airline. This manual shall not be used for any real-world procedures or operation, as it is purely for simulation purposes only. Thank you for your compliance.

If there are any questions regarding any of these operations or any information within this email, please contact the Flight Operations leadership team directly at chiefpilot@flyaay.com.

Sincerely,



Doug D.
Flight Operations
Allegiant Virtual
chiefpilot@flyaay.com

MAINTENANCE FLIGHT PROCEDURES

OVERVIEW

All of our aircraft are to be maintained in accordance with the FAA cycle-based rotation. At this current time, we are unable to accurately simulate the accrual of flight hours on specific tail numbers and specifically put in maintenance inspections in our system. As a work around, we will be offering pairings from each base to specific maintenance locations matching the real-world operations. At this current time, our two maintenance facilities are subcontracted in **Aéroport de Trois-Rivières (CYRQ)** and **Rafael Hernández Airport (TJBQ)**.

PAIRINGS

ABE				GRR			
Flight #	Departure	Arrival	Equip	Flight #	Departure	Arrival	Equip
9501	KABE	CYUL	A320	9506	KGRR	CYUL	A320/319
9501	CYUL	CYRQ	A320	9506	CYUL	CYRQ	A320/319
9502	CYRQ	KABE	A320	9508	CYRQ	KGRR	A320/319
CVG				PIT			
Flight #	Departure	Arrival	Equip	Flight #	Departure	Arrival	Equip
9503	KCVG	CYUL	A320/319	9511	KPIT	CYUL	A319
9503	CYUL	CYRQ	A320/319	9511	CYUL	CYRQ	A319
9504	CYRQ	KCVG	A320/319	9512	CYRQ	KPIT	A319
LAS				IWA			
Flight #	Departure	Arrival	Equip	Flight #	Departure	Arrival	Equip
9513	KLAS	CYUL	A320/319	9515	KIWA	CYUL	A320/319
9513	CYUL	CYRQ	A320/319	9515	CYUL	CYRQ	A320/319
9514	CYRQ	KLAS	A320/319	9516	CYRQ	KIWA	A320/319
FLL				PIE			
Flight #	Departure	Arrival	Equip	Flight #	Departure	Arrival	Equip
9509	KFLL	TJBQ	A320/319	9517	KPIE	TJBQ	A320/319
9510	TJBQ	KFLL	A320/319	9518	TJBQ	KPIE	A320/319
PGD				SFB			
Flight #	Departure	Arrival	Equip	Flight #	Departure	Arrival	Equip
9519	KPGD	TJBQ	A320/319	9521	KSFB	TJBQ	A320/319
9520	TJBQ	KPGD	A320/319	9522	TJBQ	KSFB	A320/319
VPS				IND			
Flight #	Departure	Arrival	Equip	Flight #	Departure	Arrival	Equip

9523	KVPS	TJBQ	A320/319	9525	KIND	TJBQ	A320/319
9524	TJBQ	KVPS	A320/319	9526	TJBQ	KIND	A320/319
*AVL, BLI, BNA, DSM, LAX, TYS, SAV are all covered through base swaps in FL and NV hubs							
**LAS departures to SFB and on to TJBQ may also occur							

DEPARTING BASE AIRPORT

No special procedures are needed for departing the base airport. Depart from a regular gate with an applicable IFR flight plan, using the specified flight number and AAY prefix. For flights destined to stop at Montreal (CYUL) it is recommend ferrying the additional fuel required for the onward flight to CYRQ. Roughly 10,300LBS of fuel is an appropriate ferry amount (includes CYUL-CYRQ with CYUL as an alternate airport). However, if fuel endurance becomes an issue, there is no requirement to ferry. Never ferry fuel as a priority over filing an alternate airport into CYUL! For aircraft loading, there shall be no payload or flight attendants required. Be sure to update any loading software for the aircraft to reflect that. During strong wind aloft days, depending on the intended pairing, a 3rd pilot may be dispatched for relief. Update the ACM (Air crewmember) in the onboard ACARS for takeoff performance calculation should your 3rd party add-on support such.

MONTREAL (CYUL) ARRIVAL

All flights intended for CYRQ will first stop in Montreal for immigrations and customs purposes. After arrival, request taxi to the North Parking Area. The area is located by the intersection of RWY 06L-24R and RWY 10-28. Stands N1-N7 are available for parking. For additional reference on Canadian Operations, reference the International Operations section of this manual.

TROIS-RIVIERES (CYRQ) ARRIVAL

Flights continuing to CYRQ from CYUL will need to once again file an IFR flight plan. Due to US Flag Carrier limitations an Alternate Airport is required independent of the present and forecasted weather. CYRQ has a single runway (05/23) that is approximately 9,006FT in length, providing adequate runway LDA for most weather conditions. The runway is not grooved, and as such higher-than-normal autobrake and reverse usage is advisable in poor weather conditions. The airport has an RNAV approach into both runways. Upon arrival, request taxi to the AAR Aircraft Services ramp, located off taxiway B between C and A.

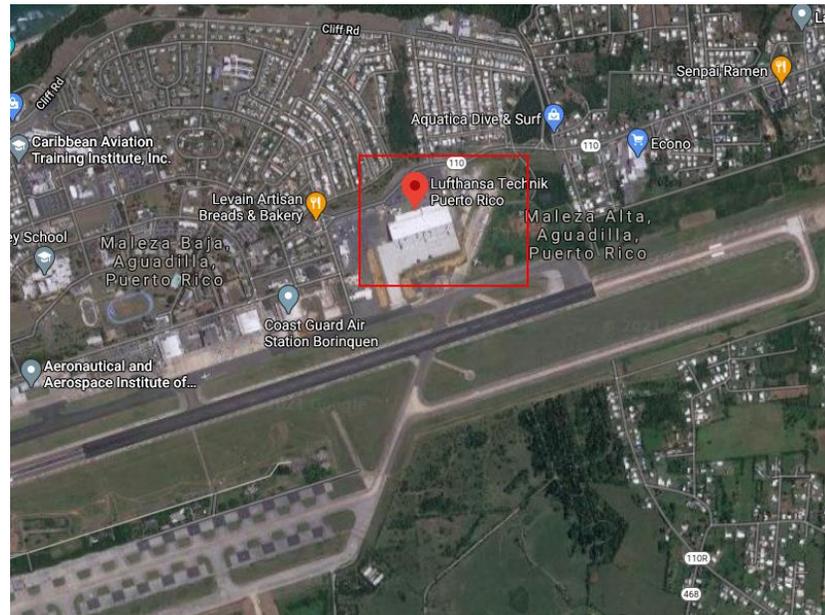


RAFAEL HERNÁNDEZ AIRPORT (TJBQ) ARRIVAL

When filing your IFR flightplan to TJBQ, it is once again required to list an alternate airport independent of weather conditions. TJBQ is a multi-use joint airport shared publicly with the US Military. Extensive military helicopter activity may be observed and the possibility of an RA on approach is elevated. The airport features a single runway (8/26) approximately 11,702FT in length. The airport has an RNAV and VOR approach available to each end of the runway. Upon landing, request taxi to the Lufthansa Ramp, located at the intersection of the A and C taxiway.

RETURN TO BASE FLIGHT

When filing the flightplan back to base, an alternate is required independent of present and forecasted weather conditions. Upon arrival into a base, park the aircraft at any available Allegiant Gate.



REPOSITIONING FLIGHT PROCEDURES

It may become operationally necessary to conduct a repositioning flight. Situations such as a diversion, aircraft maintenance swap, or equipment change may require repositioning or rescue flights. These flights shall utilize a 9900-flight number and are up to the pilot to determine when they are necessary and can be flown at will. Selection of your own flight number and route are approved. Repositioning flights are conducted without passengers and may or may not include Flight Attendants based on the nature of the reposition. Maintenance personal may also be included, so feel free to update your payload. Passenger and Commercial cargo are not authorized on these flights, however Company Material (COMAT) such as replacement parts and inter-base documentation may be included. These items rarely exceed 250LBS total weight. Maintenance based repositioning flights may also incorporate specific failed items requiring the approval for a ferry permit (in the real world, don't worry not here!) Such flights might include gear down ferry's (in which a failed component may require the entire flight to be operated with the gear down), inoperative bleed/packs, inoperative autopilot and flight control computers, and a wide variety of other failures. If you chose to operate a flight with one of these factors, be sure to brush up on your aircraft limitations to ensure that you don't overspeed a system! Make sure to include your reasoning for the repositioning flight in the ACARS remarks. Below are some repositioning route ideas and typical payloads.

Departure	Arrival	Reasoning
CVG	PIT	Return to Service
PIT	CVG	Maintenance
SFB	VPS	Network Coverage
PGD	VPS	Network Coverage
BNA	TYS	Network Coverage
AVL	BNA	Network Coverage
AVL	CVG	Maintenance
CVG	AVL	Return to service
ABE	CVG	Maintenance
CVG	ABE	Network Coverage
EWR	ABE	Network Coverage
ABE	EWR	Network coverage
SAV	AVL	Network Coverage
AVL	MYR	Network Coverage
GRR	CVG	Maintenance
CVG	GRR	Network Coverage
CVG	PIA	Network Coverage
PIA	CVG	Maintenance
LAS	LAX	Network Coverage
LAX	LAS	Maintenance
LAX	IWA	Maintenance
IWA	LAX	Network Coverage
LAS	TYS	Network Coverage
LAS	SFB	Network Coverage/Maintenance
SFB	LAS	Network Coverage

LAX	SFB	Network Coverage/Maintenance
SFB	LAX	Network Coverage/Maintenance
IWA	SFB	Network Coverage/Maintenance
SFB	IWA	Network Coverage/Maintenance
FLL	SFB	Maintenance
SFB	FLL	Network Coverage/Maintenance

Typical Payloads				
Reasoning	Flight Crew	Flight Attendants	Maintenance	Cargo
Network Coverage	2 (+1 if >4hrs)	4	0 pax	0lbs
Maintenance	2	0	2 pax	250lbs COMAT
Return to service	2	0	0	0
*COMAT would typically be flown from large base to the outstation (e.g., from SFB you're more likely to encounter COMAT than from FLL)				

ATHLETICS CHARTERS

If you follow tail numbers on flight aware, you may find a lot of charters correlating to peak sports seasons for different athletics teams. These charters tend to depart and arrive from an on airport FBO. A few different ideas for these charters are listed below in a pairing format. The pairing number serves as a grouping for list of flights. Think of it as a chapter in a book. You're welcome to track any of your favorite athletics teams and follow them around to simulate a charter. When operating the charter, the legs to and from a base will only have Flight Attendants, no passengers or cargo.

Athletics Charters				
Pairing #	Flight #	Departure	Arrival	Equipment
C9000	8000	KCVG	KCMH	A320
C9000	8001	KCMH	KORD	A320
C9000	8002	KORD	KCMH	A320
C9000	8003	KCMH	KCVG	A320
C9001	8004	KCVG	KBWI	A320
C9001	8005	KBWI	KATL	A320
C9001	8006	KATL	KBWI	A320
C9002	8007	KBWI	KCVG	A320
C9003	8008	KCVG	KBMI	A320
C9003	8009	KBMI	KBWI	A320
C9003	8010	KBWI	KBMI	A320
C9003	8011	KBMI	KBWI	A320
C9004	8012	KCVG	KCAK	A320
C9004	8013	KCAK	KGSP	A320
C9004	8014	KGSP	KCAK	A320
C9004	8015	KCAK	KCVG	A320
L8000	8016	KLAS	KCOS	A320
L8000	8017	KCOS	KSMF	A320
L8000	8018	KSMF	KCOS	A320
L8000	8019	KCOS	KSMF	A320
I9000	8020	KIWA	KSGU	A320
I9000	8021	KSGU	KDFW	A320
I9000	8022	KDFW	KSGU	A320
I9000	8023	KSGU	KIWA	A320

P9000	8024	KPIE	KCHS	A320
P9000	8025	KCHS	KPHL	A320
P9000	8026	KPHL	KCHS	A320
P9000	8027	KCHS	KPIE	A320
P9001	8028	KPIE	KBGR	A320
P9001	8029	KBGR	KDCA	A320
P9001	8030	KDCA	KBGR	A320
P9001	8031	KBGR	KPIE	A320
F9000	8032	KFLL	KTLH	A320
F9000	8033	KTLH	KSBN	A320
F9000	8034	KSBN	KTLH	A320
F9000	8035	KTLH	KFLL	A320
A9000	8036	KABE	KCAE	A320
A9000	8037	KCAE	KBHM	A320
A9000	8038	KBHM	KCAE	A320
A9000	8039	KCAE	KABE	A320
G9000	8040	KGRR	KLAN	A320
G9000	8041	KLAN	KLNK	A320
G9000	8042	KLNK	KLAN	A320
G9000	8043	KLAN	KGRR	A320
G9001	8044	KGRR	KORD	A320
G9001	8045	KORD	KCID	A320
G9001	8046	KCID	KORD	A320
G9001	8047	KORD	KGRR	A320
S9000	8048	KPIT	KYNG	A319
S9000	8049	KYNG	KAZO	A319
S9000	8050	KAZO	KYNG	A319
S9000	8051	KYNG	KPIT	A319
F9000	8052	KIND	KMSP	A320
F9000	8053	KMSP	KBIS	A320
F9000	8054	KBIS	KMSP	A320
F9000	8055	KMSP	KBIS	A320

MILITARY CHARTERS

As a Civil Air Reserve Fleet airline, we may be called upon to provide essential service in times of need of the Department of Defense (simulated of course). However, it is common to find NV tails flying military charters on FlightAware. The entirety of the pairing begins in a base, and usually flies empty to its first point of pickup. Like Athletics Charters, the first and last legs will be empty, with only flight attendants. However, the structure of these flights seems to be operating on a tringle structure (meaning 3 legs, Base to Pickup, Pickup to Drop Off, Drop off to base). Below is a list of military destinations that Allegiant has commonly operated to according to public use data on Flightaware.com. You are welcome to create your own structure for these!

When operating on the base, parking will be at your discretion. We do not have access to any public information regarding on base operations and ramp spacing.

Base	ICAO Code
Wright Paterson AFB	KFFO
Travis AFB	KSUU
Biggs Army Airfield	KBIF
McChord AFB	KTCM
Minot AFB	KMOT
Nellis AFB	KLSV
Charleston AFB	KCHS
Elmendorf AFB	PAED
Norfolk International (Civilian)	KORF
Anchorage International (Civilian)	PANC
Boeing Field (Civilian)	KBFI
Tyndall AFB	KPAM
Seymour Johnson AFB	KGSB
Shaw AFB	KSSC
Luke AFB	KLUF
Davis-Monthan AFB	KDMA
McGuire AFB	KWRI
March AFB	KRIV

INTERNATIONAL OPERATIONS

Be it for maintenance, repositioning, or charter, we may regularly find ourselves flying in international airspace. This section will cover some key differences essential to operating in certain international airspace on the VATSIM Network.

CANADA

Most of our operation in international airspaces takes place in the Montreal/French Canadian region. This creates a variety of threats unique to this region of the world. Reference the table below for threats and mitigation strategies in Canadian operations.

Threat	Risks	Mitigation
Controllers/Aircraft communication in both English and French	<ul style="list-style-type: none"> Loss of Situational awareness of non-bilingual pilot Verbal accents may be difficult to understand 	<ul style="list-style-type: none"> Ask controllers to repeat themselves if you didn't fully understand. Do not accept a clearance unless you understand what you are accepting. Avoid visual approaches to reduce pilot workload
Certain phraseology may vary from US Phrasing	<ul style="list-style-type: none"> Loss of separation from pilot error or misinterpretation 	<ul style="list-style-type: none"> Advise the controller that you do not understand the instruction
On Field Operations, such as ramp and taxi procedures may be different	<ul style="list-style-type: none"> Higher potential for runway incursions and undesired aircraft states may occur 	<ul style="list-style-type: none"> Spend more time analyzing and briefing your taxi routes and the airport facility
Tendency to step down descent is more common than a continuous descent	<ul style="list-style-type: none"> Improper descent management and more likely to miss altitude crossing resulting in an UAS 	<ul style="list-style-type: none"> Verify all altitudes are properly set in the FCU prior to engaging a vertical mode
Approaches other than a standard ILS are common	<ul style="list-style-type: none"> Unique approaches can create confusion with managing the FMGC and FCU, resulting in instability or a UAS 	<ul style="list-style-type: none"> Brief all approaches applicable and the appropriate steps for managing the FCU

CENTRAL/LATIN/SOUTH AMERICA AND CARIBBEAN REGIONS

While most of our southern operations are in the relatively non-mountainous areas, it is feasible that flights may be conducted into more mountainous operations. This can pose additional threats, such as the ones listed below.

Threat	Risks	Mitigation
Controllers/Aircraft communication in both English and Spanish	<ul style="list-style-type: none"> Loss of Situational awareness of non-bilingual pilot Verbal accents may be difficult to understand 	<ul style="list-style-type: none"> Ask controllers to repeat themselves if you didn't fully understand. Do not accept a clearance unless you understand what you are accepting. Avoid visual approaches to reduce pilot workload

Certain phraseology may vary from US Phrasing	<ul style="list-style-type: none"> Loss of separation from pilot error or misinterpretation 	<ul style="list-style-type: none"> Advise the controller that you do not understand the instruction
On Field Operations, such as ramp and taxi procedures may be different	<ul style="list-style-type: none"> Higher potential for runway incursions and undesired aircraft states may occur 	<ul style="list-style-type: none"> Spend more time analyzing and briefing your taxi routes and the airport facility
Tendency to step down descent is more common than a continuous descent	<ul style="list-style-type: none"> Improper descent management and more likely to miss altitude crossing resulting in an UAS 	<ul style="list-style-type: none"> Verify all altitudes are properly set in the FCU prior to engaging a vertical mode
Approaches other than a standard ILS are common	<ul style="list-style-type: none"> Unique approaches can create confusion with managing the FMGC and FCU, resulting in instability or a UAS 	<ul style="list-style-type: none"> Brief all approaches applicable and the appropriate steps for managing the FCU
Mountainous Areas	<ul style="list-style-type: none"> Increased terrain height creates confusion for descent planning and may also lead to CFIT 	<ul style="list-style-type: none"> Operate with TERRAIN ND on anytime below FL180 Verify current altitude is above the appropriate MSA Never accept a visual approach into a mountainous airport
Tendency for controllers to issue large descents at pilots' discretion (FL300 to 6,000)	<ul style="list-style-type: none"> Can lead to instability through poor descent management and planning 	<ul style="list-style-type: none"> Understand the MSA Do not always rely on VNAV T/D calculation to provide adequate descent management. Consider creating additional reference points in the MCDU for descent, and backup all VNAV calculations with manual descent calculations. It's always okay to ask for an early descent provided you comply with all crossing restrictions and remain above the MSA.

CLASS II OVERWATER OPERATIONS

Overwater operations on Atlantic Routing is not realistically simulated on the VATSIM network through HF Frequency. As such, for VATSIM there are no changes required to our operations. Class II Navigation refers specifically to flight that occurs outside of Operational Service Volumes of any ground base navigational facility. Operators must have specific equipment onboard aircraft and FAA certification for any operation beyond 50NM from the nearest shoreline, as well as into Class II Navigation. Typically, on a release, there will be a coast out and coast in fix, or a gateway fix, marking the start and ending of a Class II area. During these portions of flight, navigation along specific routing occurs with very little room for route deviations and shortcutting. Route plotting is not required for these operations. For simulation purposes, no additional changes are needed to be made for your flight.