SUBJ: General Control Procedures

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This order describes ZFW General Control procedures for the safe and efficient operation of all air traffic control operations within the Fort Worth ARTCC. The provisions and procedures described below are supplemental to and in accordance with Fort Worth ARTCC General Policy and FAA Order JO 7110.65, as well as any published FAA guidelines and procedures. The information contained in this document is to be used for flight simulation purposes only on the VATSIM network. It is not intended, nor should it be used for real-world navigation. This site is not affiliated with the FAA, the actual Fort Worth ARTCC, or any governing aviation body. All content contained herein is approved only for use on the VATSIM network.

/Tyler Syring/
Air Traffic Manager
Fort Worth ARTCC

/Brandon Purchase/
Deputy Air Traffic Manager
Fort Worth ARTCC

/Brandon Wening/
Deputy Director for Air Traffic Services
VATUSA

Effective 04/01/2025
This order cancels all previous General Control SOPs and shall establish the ZFW JO 7110.1C

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Change Log

Date	Explanation of Changes	Initials
19 January 2021	Creation	CB
18 December 2021	Added section 1-6. VFR Ops	CB
13 July 2023	Added AFW to certified radar	XD
25 September 2023	Edits to 2-3-1, 3-2-2, 3-2-3, 4.1.2, 4.1.3	XD/JT
17 June 2024	Creation of Flight Strips chapter and other edits.	XD/TS/ND
14 March 2025	Edit to flight strip and scratchpad sections for simplicity	ND

Chapter 1: General Information
Section 1: Position Opening/Closing

1-1-1. Opening a Position
When relieving another controller, a position relief briefing shall be obtained before taking over the position. It is the responsibility of the controller being relieved to ensure the relief controller is briefed on all applicable information regarding the weather, NOTAMS, configuration, prior coordination, and traffic. The controller being relieved should remain online for a few minutes after the transfer of control to ensure the relief controller has no further questions regarding the airspace operations.

1-1-2. Closing a Position
Controllers shall give at least a five-minute notice to surrounding controllers and pilots before closing the position if it will not be relieved by another controller. If the position responsibilities will be given to another controller, ensure that the relief controller is briefed on all applicable information regarding the weather, NOTAMS, configuration, prior coordination, and traffic.

Section 2: Pilot Interactions

1-2-1. Goal/Mission Statement
At all times, controllers shall provide a realistic and enjoyable experience to pilots flying on the network.

1-2-2. Pilot Difficulties
Due to the nature of the network, there will be times when controllers will have to deal with pilot difficulties. Whether it is a technology, knowledge, or competency issue, controllers shall always remain professional. Here is a step-by-step process to follow when dealing with these situations:
1. If you have time, explain in a calm and helpful manner what needs to be corrected. Comments that are made with an attitude do not help the situation.
2. Only after a repeated behavior of disruption should a supervisor be called.

1-2-3. Contact Requests
Contact requests MUST NOT be sent to an aircraft during a critical phase of flight. This includes takeoff, landing, and when an aircraft is on final approach.

Section 3: Closures

1-3-1. NOTAMs
NOTAMs may be implemented at the controller's discretion. Note that, per VATSIM Policy, controllers shall not deny a pilot's request to use an inactive runway/taxiway. However, this does

not prevent controllers from delaying the aircraft until such time the operation can be conducted safely with minimal impact on other air traffic. When traffic conditions immediately prevent the operation, instruct the aircraft to hold and advise of the anticipated delay time and reason.

1-3-2. Class D Airports
Class D airports that have a part time tower shall be simulated open/closed during the corresponding published times. An exception can be made by ARTCC staff for events/extenuating circumstances.

Section 4: Internal Handoff Agreement

1-4-1. Transfer of Control
Controllers generally do not have control to issue any instruction to an aircraft outside their airspace unless it is defined in an LOA or SOP. Unless otherwise defined in a LOA or SOP, controllers receiving a handoff from another ZFW controller have control as follows:
1. Terminal to Terminal: Control for turns up to 45 degrees, altitude, and speed within 5 miles of the sector boundary.
2. Terminal to Enroute: Control for turns up to 45 degrees and climbs on contact.
3. Enroute to Terminal: Control for turns up to 45 degrees and descents on contact.
4. Enroute to Enroute: Control for turns up to 45 degrees, altitude, and speed within 10 miles of the sector boundary.

1-4-2. In Trail Spacing
Aircraft that are on the same route and altitude shall be handed off to other ZFW controllers with at least the following miles in trail:
1. Terminal to Terminal: 5 MIT
2. Terminal to Enroute: 5 MIT increasing to 7 MIT
3. Enroute to Terminal: 10 MIT
4. Enroute to Enroute: 10 MIT

Section 5: Midnight Operations

1-5-1. Definition
Midnight operations are where internal SOPs and other procedures may be suspended during low traffic volume in favor of more efficient operations. Midnight operations shall only be conducted between 10PM and 5AM local, and on an optional basis.

1-5-2. Procedures
When midnight operations are not being conducted, controllers are expected to follow all local procedures and policy in order to provide a more realistic/immersive experience to pilots. When more than one controller is online, all ZFW controllers must agree to conduct midnight ops.

Section 6: VFR Operations

1-6-1. Class B/C/TRSA
VFR aircraft departing class B/C/TRSA airspace shall always be assigned a departure frequency and squawk code. This information can only be omitted when the aircraft explicitly requests "Negative radar service."

1-6-2. Class D
VFR aircraft departing class D airspace shall always be given taxi instructions on initial contact. Only issue a departure frequency and squawk code when the aircraft explicitly requests radar service or flight following. Controllers shall ensure a blank flight strip is created with, at minimum, aircraft type and direction of flight.

1-6-3. VFR Restrictions
Unless otherwise specified by another SOP, do not restrict a departing VFR aircraft's altitude or route of flight.

1-6-4. STARS Data Entry
   a. At STARS-equipped airports, the clearance delivery or ground controller is responsible for inputting flight plan information into STARS. Formatting information can be found in the vNAS STARS documentation under the VFR Flight Plans section.
      i. At a minimum, controllers should enter aircraft type and destination or direction of flight. After this, controllers will need to manually request a flight strip from the printer.
   b. At airports without a STARS display, aircraft shall not be given radar services or a beacon code. They may be issued a departure frequency to contact airborne. If time and workload permit, the clearance delivery or ground controller may call the overlying radar facility for a beacon code.

Chapter 2: Scratchpad Rules
Section 1: Departures

2-1-1. IFR
   a. Aircraft that will be handed off to another radar controller on an assigned heading shall have their heading scratched as follows:
      i. HXX, where XX is the heading in two digit form (ie - 03 is 030 and 36 is 360)

1. When STARS has automatically applied a scratchpad, the heading can be entered into the secondary scratchpad, if applicable. If no heading is in the scratchpad, the aircraft is assumed to be on course.
       ii.   Aircraft on pilot-nav departure procedures should not be scratched.

2-1-2. VFR
   a. Aircraft that will be handed off to another radar controller on an assigned a heading shall have their heading scratched as follows:
       i.   HXX, where XX is the heading two digit form (ie - 23 is 230 and 05 is 050)
   b. Aircraft not on a heading shall have their destination or direction of flight in the scratchpad. To avoid initiating a handoff, utilize the full syntax for entering a scratchpad or enter it into the secondary scratchpad.
   c. Controllers may use the NFF scratchpad as a reminder that an aircraft is not requesting flight following.

2-1-3. FF, NFF, and NRS Definitions
a. When an aircraft requests "Flight Following," they shall receive radar services until the pilot requests to cancel flight following.
b. When an aircraft requests "No Flight Following," they shall receive radar services until the outer area, then be terminated by approach/departure. The outer area is defined by the AIM as "20 NM from the primary class C airport."
c. When an aircraft requests "Negative Radar Service," they shall receive radar services until the edge of the surface area, then be terminated by tower. The aircraft shall be asked of their on-course and heading instructed to maintain VFR below the outer shelf. The tower controller shall say "Radar contact" on departure and "Radar service terminated, squawk VFR, frequency change approved" when clear of the surface area.

Section 2: Arrivals

2-2-1. IFR
a. Aircraft on approach should be scratched as follows:
   ● When flying the advertised approach, only the runway shall be placed in the primary scratchpad.
   ● When flying an approach other than the advertised approach, the approach type shall be placed in the secondary scratchpad while the runway assignment is in the primary scratchpad.

2-2-2. VFR
   a. If the radar controller working a VFR aircraft assigns a runway, the runway shall be scratched.

b. VFR aircraft in some TRACONS may not have a destination shown, controllers shall add their destination or direction of flight.

2-2-3. General
a. During opposite direction operations, controllers shall place ODO in the 4th line of all aircraft involved (ERAM) or use the OD Special Purpose Code (STARS).
   i. *QS ODO [CID]* or *OD<Slew>*
b. Controllers may utilize the following scratchpads as a reminder and coordination tool.
   i. JFA - Just flying around
   ii. LCL - Local
   iii. CTY - City tour/overflight
   iv. HLD - Holding
   v. JMP - Parachute jump activity
   vi. OTP - VFR on Top

Section 3: Automated Coordination

2-3-1. Requirements
Disclaimer, those who do not know how to use the scratchpad functions shall refer to the CRC documentation for assistance with how to use such tools.
a. When an aircraft is not on course, the heading is scratched.
b. When an aircraft is deviating, the Center controller shall put the deviation in the fourth line, as follows
   i. DL, DR, or D (deviation left, right, or left and right) followed by,
   ii. /FIX (fix assigned for the aircraft to be navigating to after the deviation) or F (next fix in the flight plan).
   iii. All flight plan data must be up to date to reflect the new fix if it is not the next fix
   iv. IE - DL/TTT
c. The Center controller shall use the VCI (Voice Communications Indicator) to indicate if an aircraft is on frequency or not (//CID or slew the VCI click spot)
d. TRACON automated pointouts shall be used unless verbal coordination is required. The TRACON controller may also use scratchpads to coordinate automated point outs.
e. The TRACON and Center controllers must use a manual point out to each other via verbal communication.
f. The Center must use automated pointouts IAW JO 7110.65 with the following local exception,
   i. Automated point-outs for aircraft that are transitioning stratums (e.g., low to high) can be made in two ways.

A.　　The altitude the aircraft will be climbing/descending to is displayed in the data block.
1. Once approved, the receiving controller has authorized a climb/descent to that altitude.
B.　　The altitude displayed in the data block is at the top/bottom of its stratum and is below/above the receiving controller's stratum.
1. Once approved, the receiving controller has authorized a climb/descent to the top/bottom of their sector
g. Interim altitudes must be used if an aircraft is not climbing to the aircrafts requested or assigned altitude.
h. IAFDOF internally shall be approved with the acceptance of radar identification. If unable, verbal coordination is required.
i. Verbal coordination is required in external facilities unless explicitly approved in a Letter of Agreement.

Chapter 3: Flight Strips
Section 1: General

3-1-1. Usage
a. Controllers shall not delete, modify, or otherwise tamper with flight strip separators. These separators are standardized throughout the facility and shared with other controllers.
b. When present, the use of memory aid strip separators is mandatory, and memory aid separators shall be returned to their starting position when no longer needed.
c. Controllers must comply with ZFW flight strip policies and procedures.

3-1-2. Tower Cab Usage
The use of flight strips is mandatory for all departures. Controllers should use the flight strip bay for the position they are currently connected as, but may pass strips between bays when providing top-down coverage as a memory aid.

3-1-3. Approach Control Usage
a. Flight strip usage as a TRACON controller is required in the following situations:
i. IFR departures from satellite/non-towered airports
ii. When the TRACON controller is providing top-down service with other controllers

3-1-4. Enroute Control Usage
Flight strip usage in the enroute environment is not required and may be used at controller discretion to assist in coordinating with underlying facilities.

Section 2: Types of Flight Strips

3-2-1. Standard Strips

These strips are automatically printed by IFR aircraft when they file. When a pilot at a STARS-equipped tower is requesting VFR radar services, controllers will print a standard flight strip for that flight after completing the flight data task(s).

3-2-2. Blank Strips

Blank strips will be used for VFR aircraft that are departing or arriving from a non-STARS-equipped tower. Blank strips can also be used prior to entering VFR or local IFR flight plan information into STARS.

3-2-3. Arrival Strips

Arrival strips are generated when airborne aircraft are less than 20 minutes from arrival. Controllers may mark the parking location of the aircraft, but this step is not required.

3-2-4. Half Strips

Half strips allow for notes and remarks to be passed between controllers utilizing the same flight strip bay.

Section 3: Strip Marking and Strip Movement

3-3-1. General

  a. Flight strip markings are used to increase controller-controller coordination and standardize the format of information across the facility.
  b. Controllers should make the appropriate marks for positions that they are assuming. For example, a single controller working local control positions should also make the ground control and clearance delivery marks. When clearance delivery and ground control are combined, ground control will make both marks.
  c. Some flight strip marking duties may be a shared or individual task. For example, a flight data controller may be responsible for making the clearance delivery annotations. All controllers who interact with the flight strip share responsibility for ensuring that annotations are correctly made and flight plan information is up to date.
  d. This section may be superseded by facility specific SOPs and therefore should only be used at facilities that do not contain their own flight strip marking section.

3-3-2. Flight Strip Annotations

<u>Shared Strip Marking Functions</u>

Box 1: ATIS code reported by pilot
Box 2: Assigned departure runway

<u>Clearance Delivery Strip Marking Functions</u>

Box 4: Clearance given or TDLS message sent (marked with a "✓" **[SHIFT]+[/]**)
Box 6: Traffic Management Initiative applies (marked with **TMI** or a time if the TMI is an EDCT)
Box 9: Assigned departure sector or frequency if departure is split.
> *L, Z, NW, .4, .55 are all acceptable ways to accomplish this coordination*

<u>Ground Control Strip Marking Functions</u>

Box 5: Intersection departure assignment (if other than full length)

3-3-3. Flight Strip Movement and Offsetting

a. Flight strips can be passed internally within a facility such as an ATCT or TRACON as outlined in vStrips documentation. Transfer of strips between positions shall be completed after the relevant markings have been made and once the aircraft is no longer on frequency. For example, after an aircraft has been issued taxi instructions to the runway, the ground controller shall push the strip to the local controller's bay.

b. Flight strips should be offset as a memory aid when an aircraft has been issued an instruction to LUAW, clearance to takeoff, or issued a runway crossing instruction.

<u>Examples</u>
Numbered boxes

AAL1283	0527	KDFW KCVG	KDFW ZACHH4 BSKAT LIT J131	1	2	3
B738/L	P2000		PENBE TERGE SARGO4 KCVG	4	5	6
153	350		○TCAS	7	8	9

Blank Flight Strip

Completed VFR Flight Strips

CXK152			EASTBOUND	W	16	
CI72						
	035					

TRF542			PATTERN	W	16	
P28A						

Half Flight Strip used for notes about the ATIS

ATIS A – South VMC

Example of a completed flight strip for a DFW departure

UAL11	0571	KDFW KDTW	KDFW ZACHH4 BSKAT LIT J131	B	17C	
H/MD11/L	P2045		PXV WWODD HANBL3 KDTW	✓		
939 ‖‖‖‖‖‖‖	350		○TCAS			

Flight strip that was offset. Aircraft was cleared for takeoff from intersection Y

AAL1283	0527	KDFW KCVG	KDFW ZACHH4 BSKAT LIT J131	C	17R	
B738/L	P2000		PENBE TERGE SARGO4 KCVG	✓	Y	
153 ‖‖‖‖‖‖	350		○TCAS			

Chapter 4: Radar Simulation
Section 1: Introduction

4-1-1. Radar Covered Airports
Radar covered airports are airports where radar coverage exists to the surface. At these airports, the associated controllers can utilize all forms of radar separation. All class B C and D airports underlying an approach facility are assumed to have radar coverage to the ground.

4-1-2. Non-Radar Covered Airports
Non-radar covered airports are airports where radar coverage does not exist to the surface. At these airports, the associated controllers cannot use radar separation. These airports include ADM, CSM, GVT, GYI, HOB, TXK, and all non-towered airports.

Section 2: Tower Equipment Classification

4-2-1. Certified Radar Towers

a. Certified radar towers can use all forms of radar separation, and are responsible for applying separation between the following aircraft:

- IFR/IFR
- IFR/VFR, when required by airspace
- VFR/VFR, when required by airspace

b. Certified radar towers are considered a radar position, and as such, can issue control instructions that a normal approach/departure position would.

c. The following airports are considered certified radar towers:

- DFW
- DAL
- OKC
- ABI
- ACT
- AFW
- BAD
- DYS
- FSI
- GGG
- GRK
- LBB
- LTS
- MAF
- MLU
- SHV
- SJT
- SPS
- TIK

4-2-2. Uncertified Radar Towers

a. As per 7110.65 3-1-9: "Uncertified tower display workstations must be used only as an aid to assist controllers in visually locating aircraft. Radar services and traffic advisories are not to be provided using uncertified tower display workstations."

b. Uncertified radar towers can use automation capabilities to coordinate inbound/outbound traffic.

c. Uncertified radar towers shall not issue a beacon code to VFR aircraft requesting flight following.

d. The following airports are considered uncertified radar towers:

- ADS
- DTN
- DTO
- FTW

- FWS
- GKY
- GPM
- NFW
- OUN
- PWA
- RBD
- TKI
- TYR

4-2-3. "VFR" Towers

a. VFR towers cannot use any form of radar separation or control. When weather conditions permit, VFR towers may use tower-applied visual separation between successive inbound and/or outbound traffic. Tower shall inform the overlying radar controller when they are no longer able to provide visual separation.

b. VFR towers have no automation capability to coordinate inbound/outbound traffic. All coordination must be done through verbal means.

c. VFR towers shall not issue a beacon code to VFR aircraft requesting flight following.

d. The following airports are considered VFR towers:
- ADM
- CNW
- CSM
- GVT
- GYI
- HLR
- HOB
- HQZ
- LAW
- TXK

Chapter 5: Approach/Tower Agreement
Section 1: Tower Responsibilities

5-1-1. Definitions

a. Up-Down class D airports are those airports where the tower and TRACON are co-located at the same facility.

b. Non-Up-Down Class D Airports are airports where the tower is not associated with its own approach control.

5-1-2. Class B/C/Up-Down D Airports

a. IFR releases shall be automatic if the aircraft departs on the primary departure runway(s) on standard headings/altitudes, unless otherwise specified by SOP.

b. Radar departures require a rolling call for radar identification. Use the alias command *.d (XX) (RWY)* where XX is the departure controller's sector ID.

c. In lieu of using the alias method for rolling calls, controllers using vSTRIPS may elect to use pushed flight strips to simulate a more realistic rolling call. Coordination shall occur with the local and radar controller to determine the preferred rolling call method.

5-1-3. Non-Up-Down Class D Airports

a. IFR releases are not automatic and need to be coordinated for each individual aircraft. Coordinated information should include the phrase "Request release" followed by the aircraft's callsign and departure runway.

b. Radar departures require a rolling call for radar identification. Use the alias command *.d (XX) (RWY)* where XX is the departure controller's sector ID.

c. In lieu of using the alias method for rolling calls, controllers using vSTRIPS may elect to use pushed flight strips to simulate a more realistic rolling call. Coordination shall occur with the local and radar controller to determine the preferred rolling call method.

d. When controlling airports that do not have radar coverage to the ground (ADM, CSM, GVT, GYI, HOB, TXK) inform ZFW when an IFR arrival has landed.

> EXAMPLE – *"Frisco Low, Ardmore tower, arrival"*
> *"Frisco Low"*
> *"ENY3395 has arrived. MK"*
> *"CB"*

5-1-4. Go-Arounds

Go-Arounds shall be handled in the order of preference listed below:

1. As specified in the SOP.
2. Give the standard initial IFR departure heading/altitude assignment.
3. Instruct the aircraft to fly the published missed approach.
4. If on a visual approach, have the aircraft enter the pattern.

Section 2: Approach Responsibilities

5-2-1. Class B/C/TRSA Airports

a. IFR arrivals do not need to be coordinated with the tower, so long as the appropriate scratchpad is entered.

b. VFR arrivals should be sequenced to the airport by approach. The approach controller shall initiate a radar handoff to the tower, and transfer communications after acceptance. If a VFR arrival calls tower directly, the tower controller shall instruct the pilot to contact approach for sequence to the airport, except:

1. When the tower controller deems the operation reasonable, and the operation will not hinder traffic flow. In this case, assign a squawk code, radar identify the aircraft with the phrase "Radar Contact," and issue control instructions, as necessary.

5-2-2. Radar Towered Class D Airports
a. IFR arrivals do not need to be coordinated with tower, so long as the appropriate scratchpad is entered.

5-2-3. "VFR" Towered Class D Airports
a. IFR arrivals need to be coordinated with the tower verbally before reaching 15 flying miles from the airport. Coordinated information should include the aircraft's callsign, aircraft type, distance and direction from the airport (if the aircraft is doing a visual approach), and type of approach if different than advertised.

> EXAMPLE – *"Lawton tower, Fort Sill approach, inbound"*
> *"Lawton tower"*
> *"ENY3345, E145, estimated LAW airport at 1420, XD"*
> *"JT"*

b. VFR arrivals shall be told *"RADAR SERVICE TERMINATED, CONTACT (facility) TOWER (frequency)"* no later than 10 flying miles from the airport.