Federal Aviation Administration

Initial En Route Qualification Training

Handout 00
Aero Center Phraseology And Stripmarking Guide

Course 50148001

DATA SHEET

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DISCLAIMER

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PREFACE

The phraseology and stripmarking examples that follow are intended to help you practice and learn the required content and format. The following examples do **not** necessarily reflect all air traffic scenarios used at Aero Center. For example, you will be expected to add altitude restrictions and route revisions as necessary during scenarios. Some of the strips in this guide show ICAO identifiers for a departure point and/or destination. The Nonradar section of the course does not use ICAO identifiers while the Radar/ERAM section does.

Some phraseology examples for making a coordination call have the phrase; “wait for acknowledgement” and some do not. The intent is for the student to understand that they are communicating and that it is a two-way process in which listening is as important as talking. Coordination should not be about how quickly the controller can talk and then hang up. We do not want students going to their facilities thinking this is a normal way of operation.

In many cases the student may state the type of coordination at the beginning of the call which allows the person on the other end to prepare accordingly and eliminates the need for a pause before continuing, for example, “Picayune Low, Jackson Low APREQ.”

Students may choose not to state the type of coordination upon initiating the call or are unable to because it’s a “silent” dial call; therefore, the answering party is not aware of the type of coordination until the student states it. In this case a pause would give the receiving person time to prepare (getting a strip and a pen) or to complete a higher priority task.

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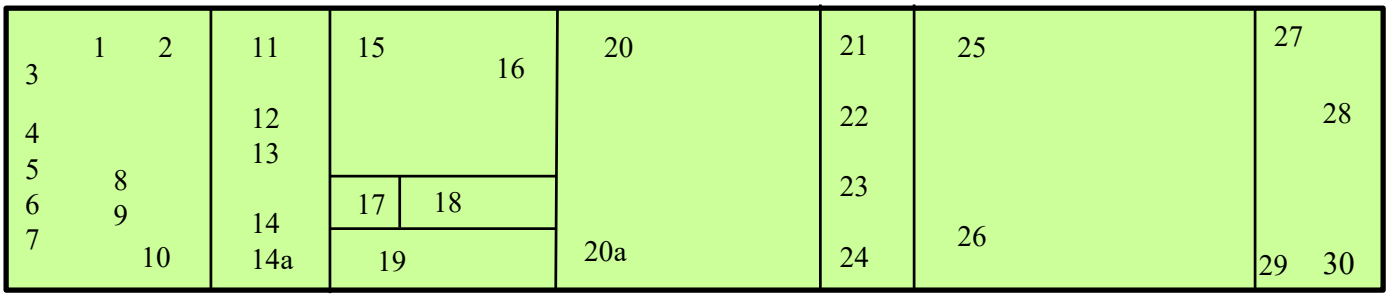
NONRADAR

AERO CENTER (ZAE) STRIPMARKING COLORS



Space 1-10 Checkmark to indicate the aircraft has or was given the current altimeter in **BLACK** (Optional). Checkmark can be in spaces 1 – 10.

Space 4 Equipment Suffix (TUX) may be underlined in **RED**

Space 8-9 Miles per minute (optional) in **RED**

Space 11 Previous fix in **BLACK**

Space 12 Estimated time over previous fix in **BLACK.** KMLU proposed departure time in **BLACK**.

Space 13 KMLU assumed departure time in **RED**. Revised estimate over previous fix in **BLACK**.

Space 14 Expect Departure Clearance in **BLACK** (line thru when clearance is given is optional)**.** KMLU actual departure time in **BLACK**. Actual departure time on first fix posting after departure in **BLACK.**

Space 14A Plus time in minutes in **BLACK**, Actual departure time on an Enroute strip only (optional) in **BLACK,** CTL in **RED** (reminder), CTL in **BLACK** (after successful coordination).

Space 15 Initial Departure Instructions in **RED** or **BLACK**, Reminders in **RED** ***(RLS, SYD, V<, T)*** may be recorded in or just to the left of this box, Airport separation in **BLACK (**1 and 2 minute rules, 22 and 44 knot rules, RLS and SYD), Center estimate over posted fix in **BLACK,** VOID times in **BLACK** *if assigned*, *Cancellation of IFR in BLACK if there is no room in space 18.*

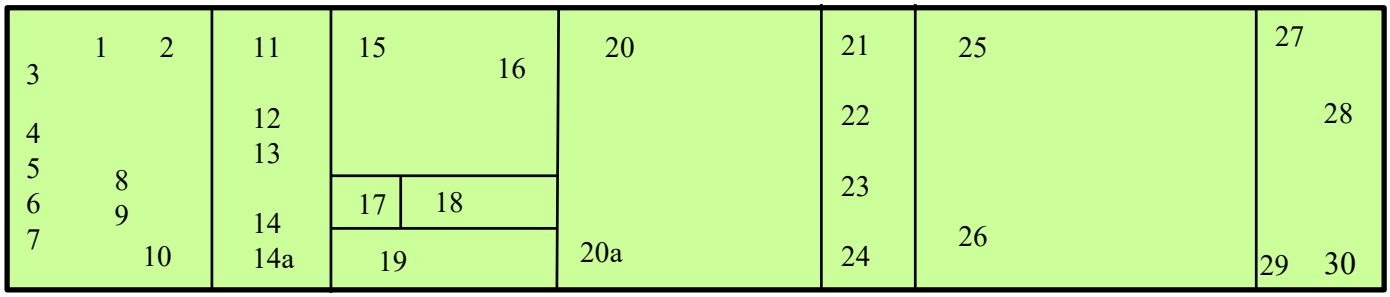
Space 16 Departure/Arrival arrow **RED** or **BLACK**,

Space 17 Pilot's estimate in **BLACK**

Space 18 Assumed departure time in **RED**, Separator (/) in **RED** or **BLACK**, Actual departure time in **BLACK**, Cancellation of IFR time in **BLACK**, Actual time over the posted fix in **BLACK**, Time the aircraft landed if posted fix is airport in **BLACK**

Space 19 Posted fix in **BLACK**

AERO CENTER (ZAE) STRIPMARKING COLORS (cont'd)



Space 20 Altitude information: Final altitude in **BLACK**, Restriction bar in **BLACK**, Crossing restrictions in **RED** or **BLACK**, Reports in **BLAC**K, check marks in **BLACK,** Ws in **RED**, A **RED** or **BLACK** period **. .** as a reminder of established on may be used in preplanning or when issuing the clearance, a "/ " must be preceded by a written altitude. All periods are optional.

Space 20a **OPTIONAL USE,** when voice recorders are operational;

REQUIRED USE, when the voice recorders are not operating and the strips are being used at the facility. This space is used to record reported RA events. The letters RA followed by a climb or descent arrow (if the climb or descent action is reported) and the time (hhmm) the event is reported.

Space 21 Next fix or coordination fix in **BLACK**

Space 22 Pilot's estimate over next fix in **BLACK**, Airport center estimate in **BLACK ,** Time the aircraft landed in **BLACK** if space 21 is the airport. Center estimate over next fix, "C1234" to distinguish it from the pilot estimate written above it.

Space 23 Direction arrows (optional after scenario 9) in **RED**

Space 24 Requested altitudes never get crossed out unless a new requested altitude is received from the pilot, requested altitude in **BLACK,** - New Requested altitude in **BLACK,** Ws in **RED**

Space 25 Route amendments and caret (**^**) in **RED** or **BLACK**

Space 26 Emergency-E- in **RED**, Remarks in **BLACK**, Reminders in **RED**, Reports in **BLACK,** Blocked airspace in **BLACK, (**expected altitude 10 < D) in **BLACK,** FRC may be underlined in **RED** as a reminder. Expected higher altitude with alternate instructions in **BLACK.** KMLU departure overflow data.

Space 28 Miscellaneous control data in **BLACK**, Reminders in **RED**

Space 29 Transfer of control data in **BLACK**

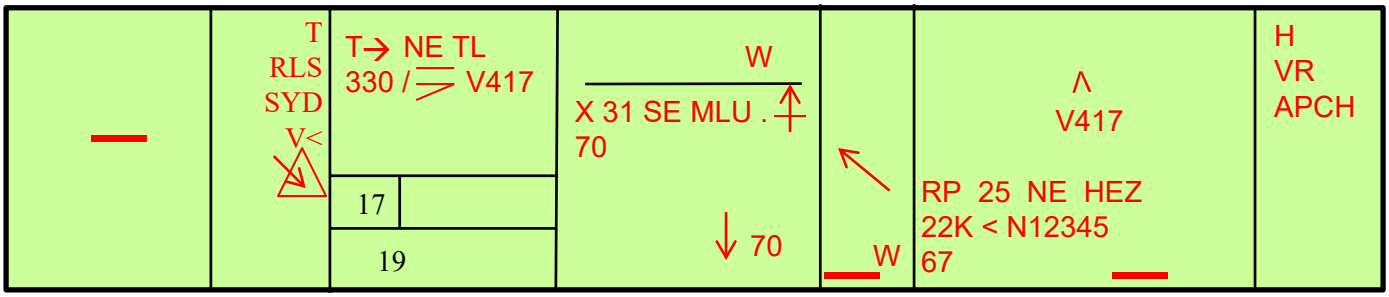
Space 30 Transfer of control data in **BLACK.** Coordination indicator in **BLACK.**

All preplanning is in **RED** except the restriction bar. Ws are in **RED**. Unwanted or unnecessary information is lined out in **BLACK** (except space 20 or 22-24 where unwanted or unnecessary altitude information , radar contact lost and pilot resumed own navigation is crossed out in **BLACK**). **RED** circles are to indicate completed coordination, **BLACK** circles are to indicate the information has been issued or relayed to a pilot. You cannot use a "X" or "-" to delete just a circle, this action deletes the circle and information within the circle.

NOTE: The stripmarking recorded in a space on a strip depends on the type of strip (Proposal, Departure, En route or Arrival).

ZAE STRIPMARKING COLORS (cont'd)

AERO Center Preplanning for Reminders



Note: RP and additional information must be rewritten in black when issued

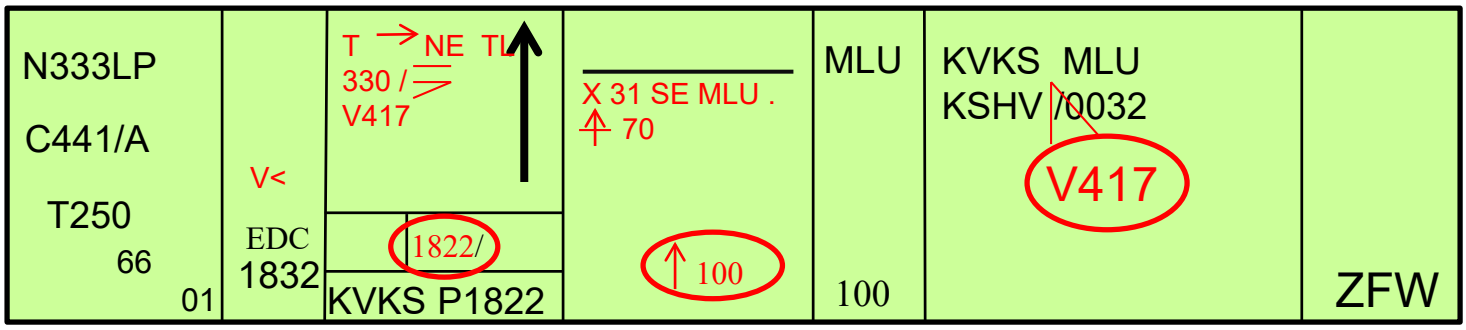
AERO Center Commonly Used Stripmarking

1.	T→	via Depart
2.	↑	climb and maintain
3.	⏊	at or above
4.	TR	turn right
5.	TL	turn left
6.	/	until, slant, or as a separator
7.	↓	descend and maintain
8.	⏊	at or below
9.	>	before
10.	<	after or past
11.	X	cross
12.	MIN	minutes
13.	NM	miles
14.	⩥	joining
15.	N	north
16.	NE	northeast
17.	E	east
18.	SE	southeast
19.	S	south
20.	SW	southwest
21.	W	west
22.	W	Warning(will be lined through never X-d out if needed)
23.	NW	northwest
24.	D	cleared to depart from a fix
25.	- (Dash)	From-to (route, time, etc.)
26.	A	cleared to airport
27.	F	cleared to the fix
28.	H	cleared to hold and instructions issued
28.	@	at and maintain
29.	VR	VOR Approach
30.	↘	enter controlled airspace
31.	VA	visual approach
32.	ILS	ILS approach
33.	RP	report passing
34.	RR	report reaching
35.	RL	report leaving
36.	**W**	warning
37.	K	knots
38.	**E**	emergency
39.	RV	radar vector
40.	EDC	expect departure clearance **locally adapted*
41.	EFC	expect further clearance
42.	FET	fuel exhaustion time
43.	ETA	estimated time of arrival
44.	V	void or cleared beyond the fix
45.	SYD	visual separation approved
46.	RLS	released
47.	CTL	control
48.	R	radar
49.	APCH	approach
50.	Ȼ	Pilot cancelled flight plan
50.	___	IAFDOF, either by direction of flight or inappropriate altitude for LOA
51.	Z	tower jurisdiction

NOTE: The only strip marking symbols allowed at ZAE are those covered on this page, in the 7110.65, and in your lesson plans.

DEPARTURES

KVKS Stripmarking and Phraseology



- Departure Request

  - ZAE FDU: “Flight Data Request Clearance Conquest Three Three Three Lima Papa From Vicksburg Airport to Shreveport Airport.”

  - D66: “Conquest Three Three Three Lima Papa Expect Departure Clearance One Eight Three Two, B-T.”

  - ZAE FDU: “K-D.”

  The student should place the proposal strip below the VKS bay header when FDU asks for the clearance. When the student issues the EDC they should write EDC and time as they are talking in space 14.

  The next items to complete are the assumed departure time(red), figure the times on subsequent strips(black), altitude to coordinate the aircraft climbing to(red lower right of space 20 on coordination strip, optional on all strips), and any routing changes.

- APREQ

  - D66: “Monroe Low, Jackson Low APREQ.”

  - MLU LOW: “Monroe Low.”

  - D66: “In Suspense, Conquest Three Three Three Lima Papa, Assumed Vicksburg Departure One Eight Two Two, Climbing to One Zero Thousand, via Victor Four Seventeen Monroe.”

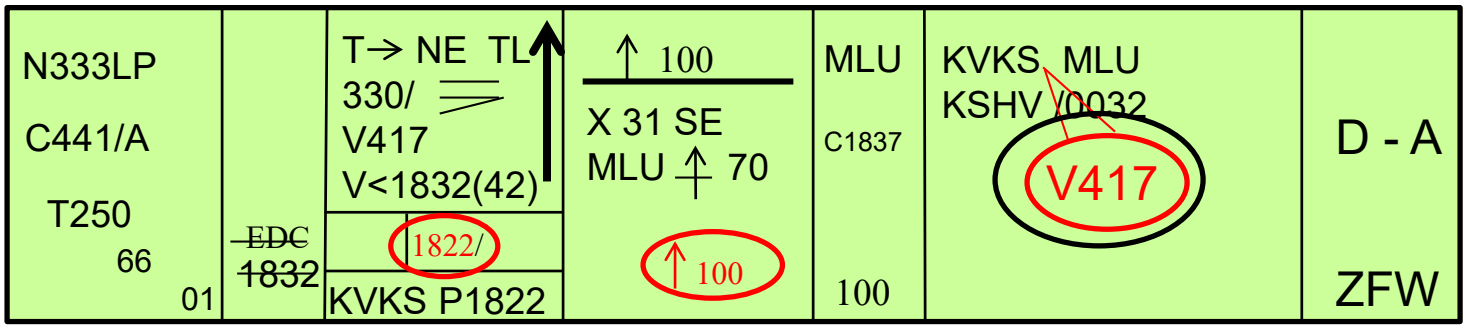
  - MLU LOW: “Conquest Three Three Three Lima Papa, Approved as Requested, O-L.”

  - D66: “B-T.”

  During this phone call RED circles have been added to show completed coordination with Monroe Low allowing N333LP to enter their airspace.

DEPARTURES (cont'd)

KVKS Stripmarking and Phraseology (cont'd)

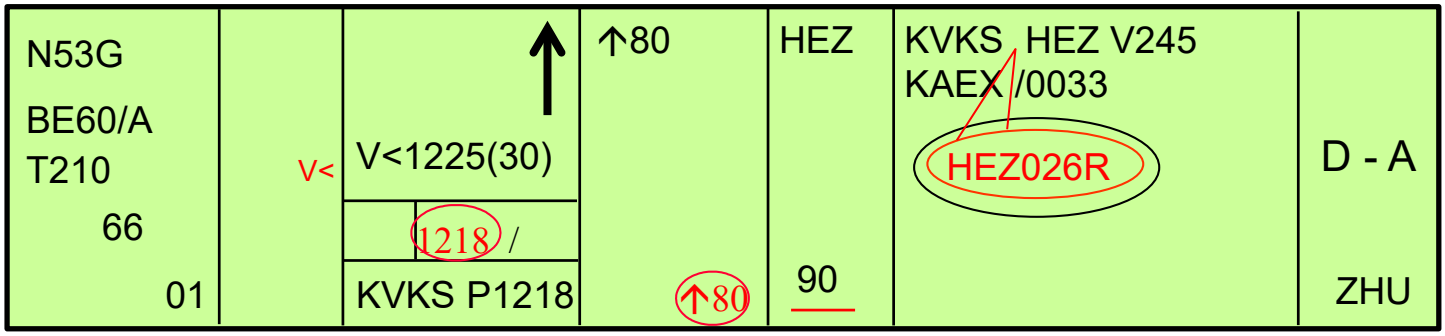


- Departure Clearance
  - D66: "Flight Data, D Sixty Six, Clearance."
  - ZAE FDU: "Flight Data."
  - D66: "Will the Pilot of Conquest Three Three Three Lima Papa Accept a Northeast Departure With Turns?" **Note**: This step may be done on initial call from ZAE FDU prior to issuing EDC.
  - ZAE FDU: "Affirmative."
  - D66: "Conquest Three Three Three Lima Papa, Cleared From Vicksburg Airport to Shreveport Airport via Depart Northeast, Turn Left, Fly Heading Three Three Zero Until Joining Victor Four Seventeen, Victor Four Seventeen Monroe as Filed. Cross Three One Miles Southeast Monroe VORTAC Established on Victor Four Seventeen At or Above Seven Thousand, Climb And Maintain One Zero Thousand. Clearance Void if Not Off By One Eight Three Two. If Not Off By One Eight Three Two, Advise Aero Center Not Later Than One Eight Four Two of Intentions. Verify This Clearance Will Allow Compliance With Local Traffic Pattern and Terrain or Obstruction Avoidance."
  - ZAE FDU: "K-D."
  - D66: "B-T."

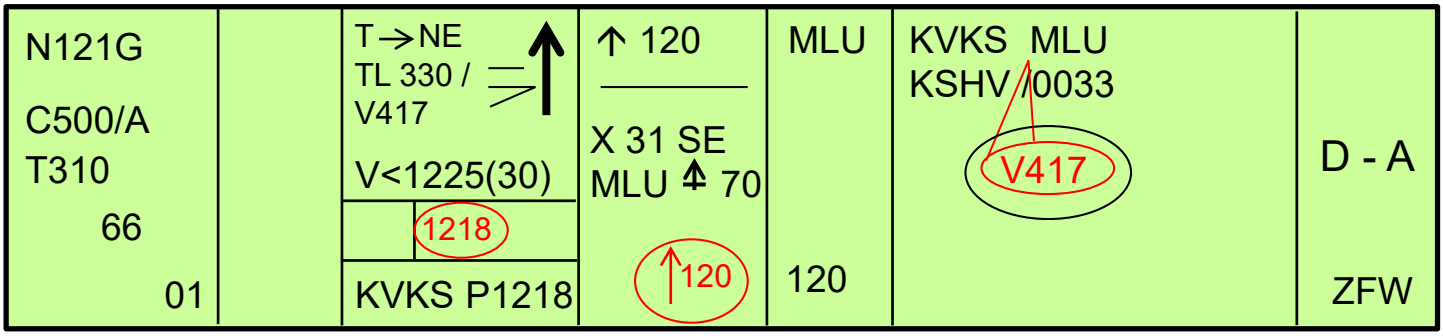
The aircraft is now cleared for departure and will call on frequency shortly. The strip now has Black markings to show the information was issued to the pilot through a Flight Data Communication Specialist. The stripmarking in space 15 could have been preplanned in RED up to but not including the void time and then circled in black as it was issued. In space 20 the crossing restriction and established on dot could have been preplanned in RED and then circled in black as it was issued. Never write over RED with Black.

DEPARTURES (cont'd)

KVKS Stripmarking and Phraseology (cont'd)



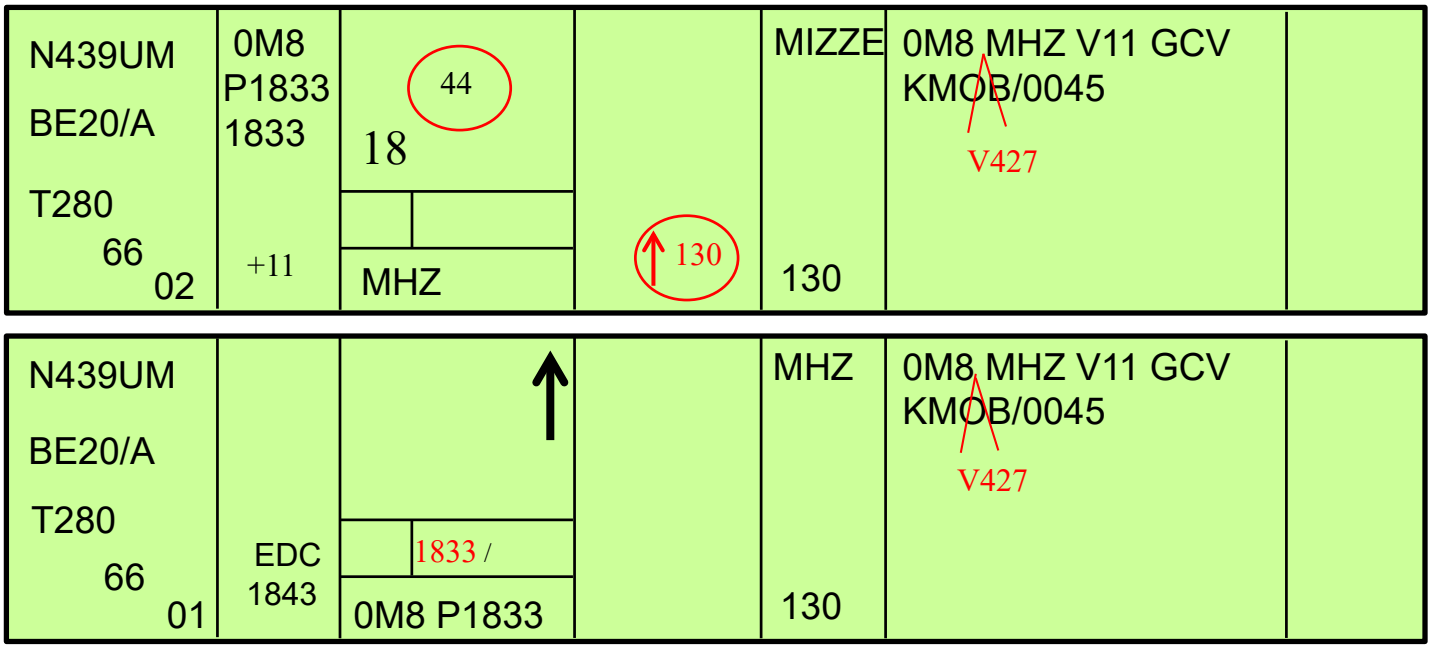
- HEZ026R Departure Clearance
  - D66: "Duke Five Three Golf, Cleared From Vicksburg Airport to Alexandria Airport via Natchez Zero Two Six Radial, Natchez as Filed. Climb and Maintain Eight Thousand, Niner Thousand is Not Available. Clearance Void if Not Off by One Two Two Five. If Not Off by One Two Two Five, Advise Aero Center Not Later Than One Two Three Zero of Intentions. Verify This Clearance Will Allow Compliance With Local Traffic Pattern and Terrain or Obstruction Avoidance. "



- VKS Departure Clearance
  - D66: "Citation One Two One Golf, Cleared From Vicksburg Airport to Shreveport Airport via Depart Northeast Turn Left Fly Heading Three Three Zero Until Joining Victor Four Seventeen, Victor Four Seventeen Monroe Direct. Cross Three One Miles Southeast Monroe VORTAC Established on Victor Four Seventeen At or Above Seven Thousand, Climb And Maintain One Two Thousand. Clearance Void if Not Off by One Two Two Five. If Not Off by One Two Two Five, Advise Aero Center Not Later Than One Two Three Zero of Intentions. Verify This Clearance Will Allow Compliance With Local Traffic Pattern and Terrain or Obstruction Avoidance. "

DEPARTURES (cont'd)

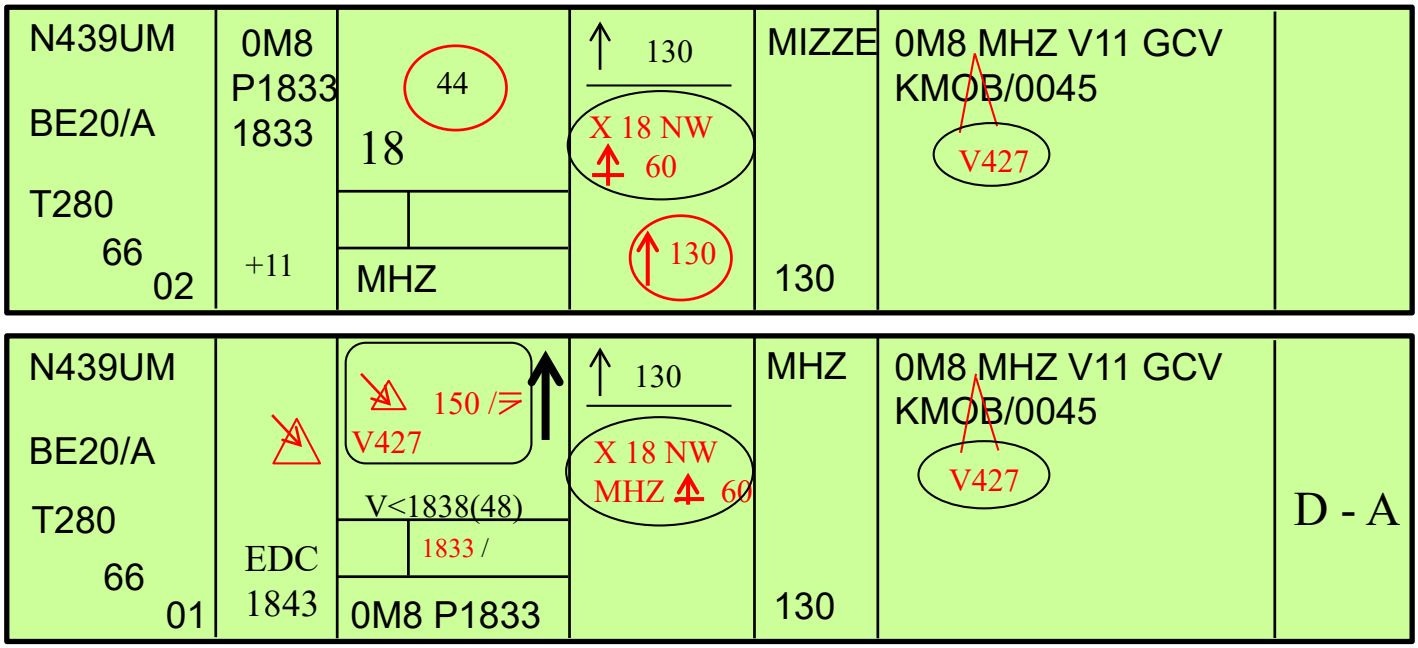
0M8 Stripmarking and Phraseology



- Departure Request
  - ZAE FDU: "D Sixty Six, Flight Data."
  - D66: "D Sixty Six".
  - ZAE FDU: "Request Clearance King Air Four Three Niner Uniform Mike From Byerley Airport to Mobile Airport."
  - D66: "King Air Four Three Niner Uniform Mike Expect Departure Clearance One Eight Four Three, S-T."
  - ZAE FDU: "K-D."
- APREQ
  - D66: "D Sixty-Five, D Sixty-Six APREQ."
  - D65: "D Sixty-Five."
  - D66: "In Suspense, King Air Four Three Niner Uniform Mike, Estimated Magnolia VORTAC One Eight Four Four, Climbing to One Three Thousand."
  - D65: "King Air Four Three Niner Uniform, Approved as Requested, B-R."
  - D66: "S-T."

DEPARTURES (cont'd)

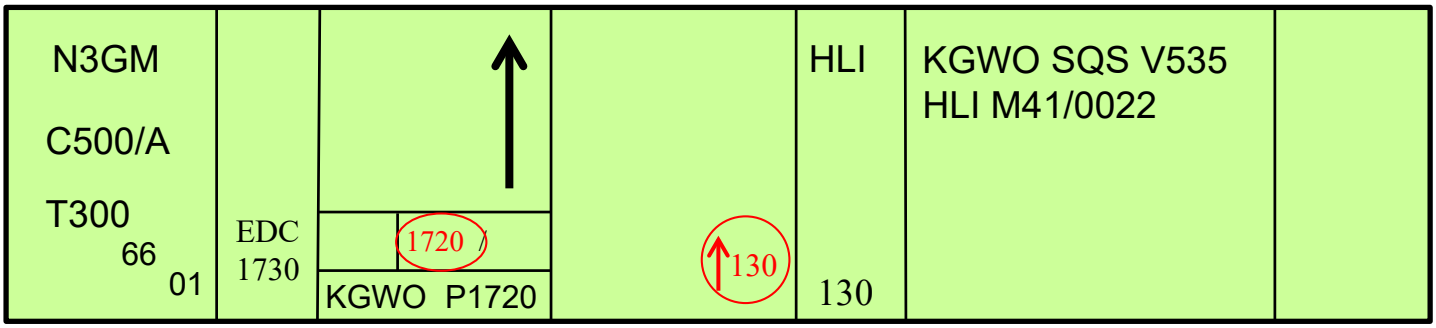
0M8 Stripmarking and Phraseology (cont'd)



- Departure Clearance
  - D66: "Flight Data, D Sixty Six, Clearance."
  - ZAE FDU: "Flight Data."
  - D66: "King Air Four Three Niner Uniform Mike Cleared From Byerley Airport to Mobile Airport via When Entering Controlled Airspace Fly Heading One Five Zero Until Joining Victor Four Twenty-seven, Victor Four Twenty-seven Magnolia as Filed. Cross One Eight Miles Northwest Magnolia VORTAC Established on Victor Four Twenty-seven At or Above Six Thousand, Climb and Maintain One Three Thousand. Clearance Void if Not Off by One Eight Three Eight. If Not Off by One Eight Three Eight, Advise Aero Center Not Later Than One Eight Four Eight of Intentions. Verify This Clearance Will Allow Compliance With Local Traffic Pattern and Terrain or Obstruction Avoidance."
  - ZAE FDU: "K-D."
  - D66: "B-T."

DEPARTURES (cont'd)

KGWO Stripmarking and Phraseology

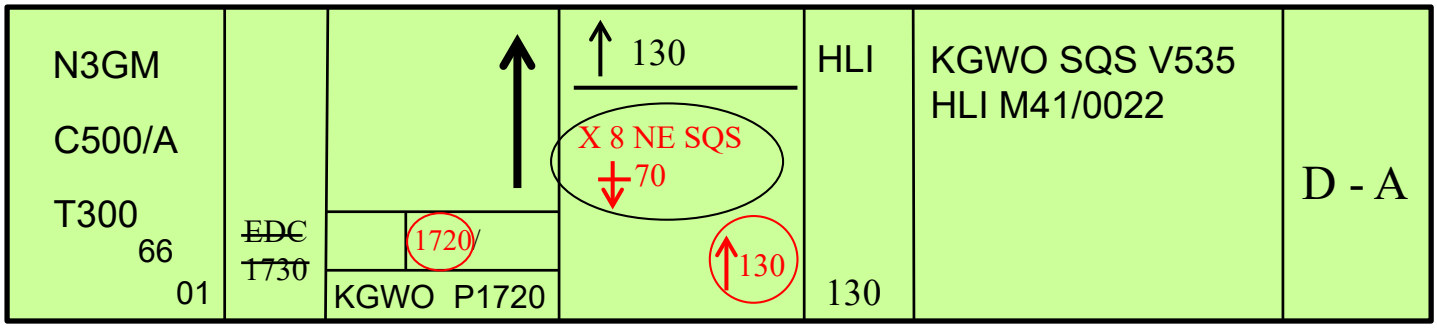


- Departure Request
  - GWO: "Jackson Low, Greenwood Tower."
  - D66: "Jackson Low."
  - GWO: "Request Clearance Citation Three Golf Mike to Holly Springs Airport."
  - D66: "Citation Three Golf Mike Expect Departure Clearance One Seven Three Zero. L-P."
  - GWO: "P-B."

- APREQ
  - D66: "D Twelve, D Sixty-Six, APREQ."
  - D12: "D Twelve."
  - D66: "In Suspense, Citation Three Golf Mike, Assumed Greenwood Departure One Seven Two Zero Climbing to One Three Thousand."
  - D12: "Citation Three Golf Mike Climbing to One Three Thousand Approved. H-R."
  - D66: "L-P."

DEPARTURES (cont'd)

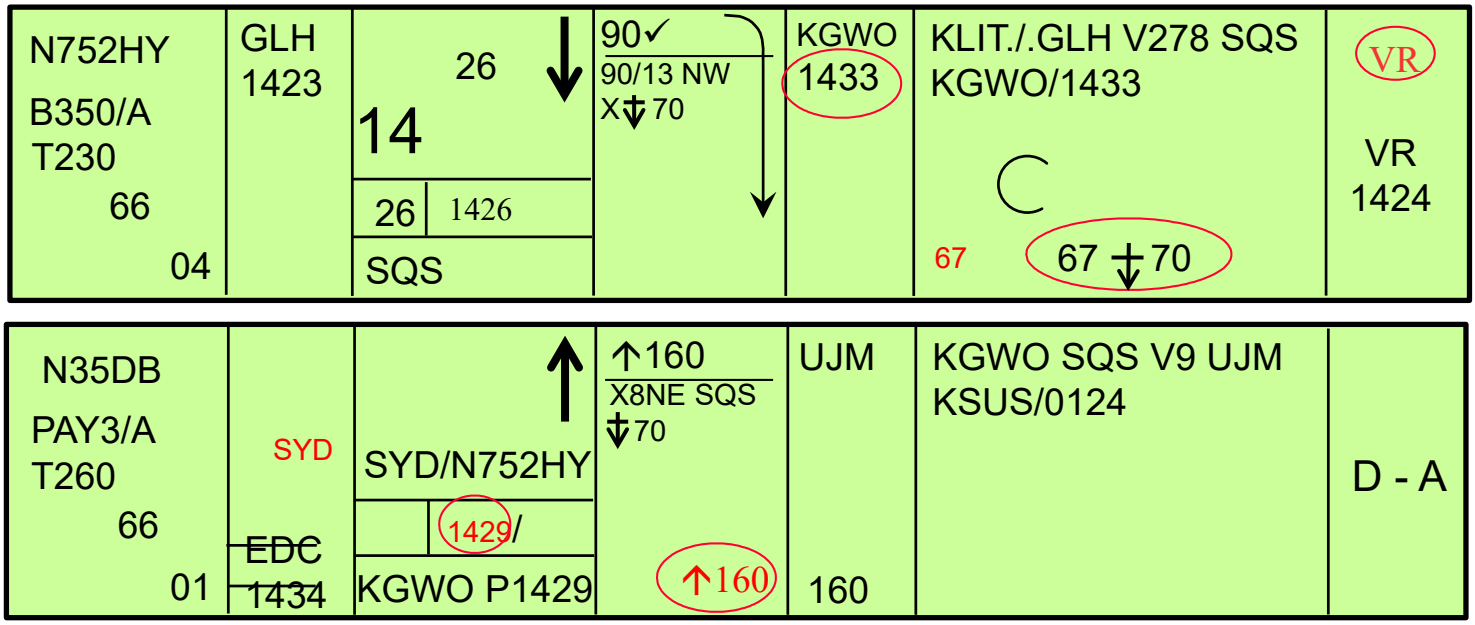
KGWO Stripmarking and Phraseology (cont'd)



- Departure Clearance
  - D66: "Greenwood Tower, Jackson Low, Clearance."
  - GWO: "Greenwood Tower."
  - D66: "Citation Three Golf Mike Cleared to Holly Springs Airport via Direct Sidon as Filed. Cross Eight Miles North East Sidon VORTAC At or Below Seven Thousand, Climb and Maintain One Three Thousand."
  - GWO: "P-B."
  - D66: "L-P

DEPARTURES (cont'd)

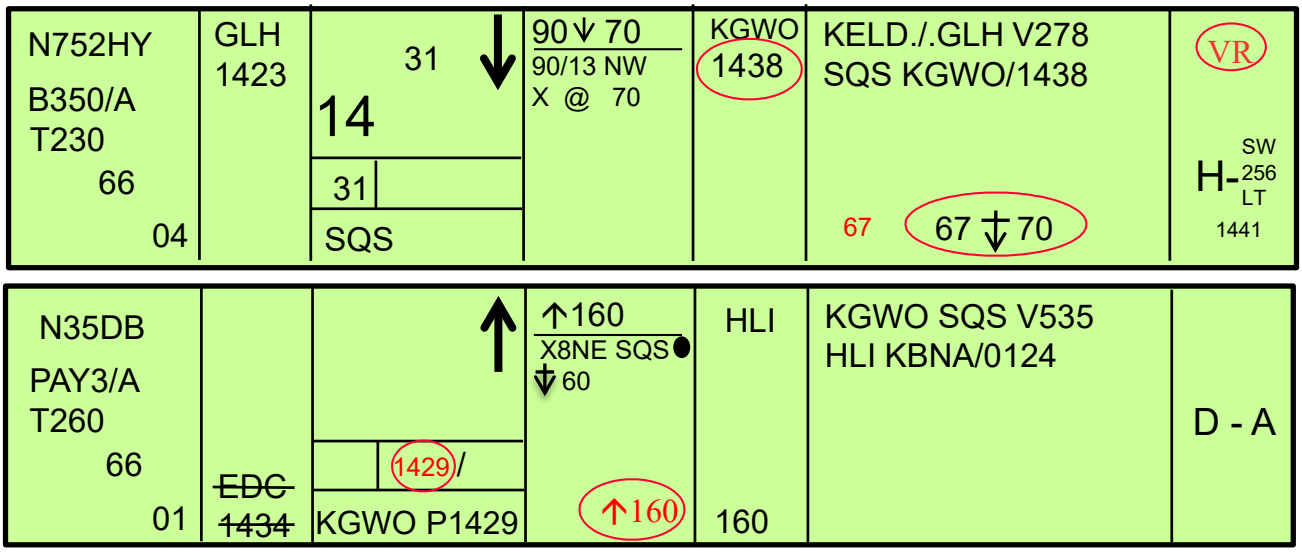
KGWO Stripmarking and Phraseology (cont'd)



- Departure Clearance SYD
  - D66: "Cheyenne Three Five Delta Bravo, Cleared to Spirit Of St. Louis Airport as Filed via Sidon. Cross Eight Miles Northeast Sidon VORTAC At or Below Seven Thousand, Climb and Maintain One Six Thousand. Visual Separation Approved Between Cheyenne Three Five Delta Bravo and King Air Seven Five Two Hotel Yankee. Cheyenne Three Five Delta Bravo Released."

DEPARTURES (cont'd)

KGWO Stripmarking and Phraseology (cont'd)



- Departure Clearance To Miss Holding Pattern Airspace

  - D66: "Cheyenne Three Five Delta Bravo, Cleared to Nashville Airport as Filed via Sidon. Cross Eight Miles Northeast Sidon VORTAC **On V535 (OR Established On V535)** At or Below Six Thousand , Climb and Maintain One Six Thousand."

NOTE: The large dot next to the restriction is optional, but highly suggested stripmarking.

DEPARTURES (cont'd)

KGWO Stripmarking and Phraseology (cont'd)

N756B C182/A T140 66 01	~~EDC~~ ~~1215~~	T→ SW – SQS RLS 3 MIN < N251D 1203/ KGWO P1200	↑ 140 X8NE SQS ↓ 70 X17NW MHZ ↑ 60	MHZ 140	KGWO SQS V9 MCB V555 PCU KGPT/0145	D - A
N251D BE20/A T210 66 01	~~EDC~~ ~~1210~~	T→ SW – SQS 1200/1200 KGWO P1200	↑140 X8NE SQS ↓ 70 X17 NW MHZ ↑ 60	MHZ 1219 140	KGWO SQS V9 MCB V555 PCU KGPT/0057	D - A

- Departure Clearance 44-Knot Rule

  - D66: "Skylane Seven Five Six Bravo, Cleared to Gulfport Airport via Depart Southwest Direct Sidon as Filed, Cross Eight Miles Northeast Sidon VORTAC At or Below Seven Thousand, Cross One Seven Miles Northwest Magnolia VORTAC At or Above Six Thousand, Climb and Maintain One Four Thousand. Skylane Seven Five Six Bravo Released Three Minutes After King Air Two Five One Delta Departs."

Note: Departure instructions for KGWO departures (T→SW-SQS) are required when multiple aircraft are departing and a longitudinal or initial departure rule is being used. Students may use these departure instructions in anticipation of a subsequent departure. When using a longitudinal or initial departure rule, both aircraft must be given departure instructions.

• Single aircraft – If KGWO tower calls for a clearance on one aircraft and there is not another aircraft in the suspense bay, the student cannot use depart SW direct SQS.

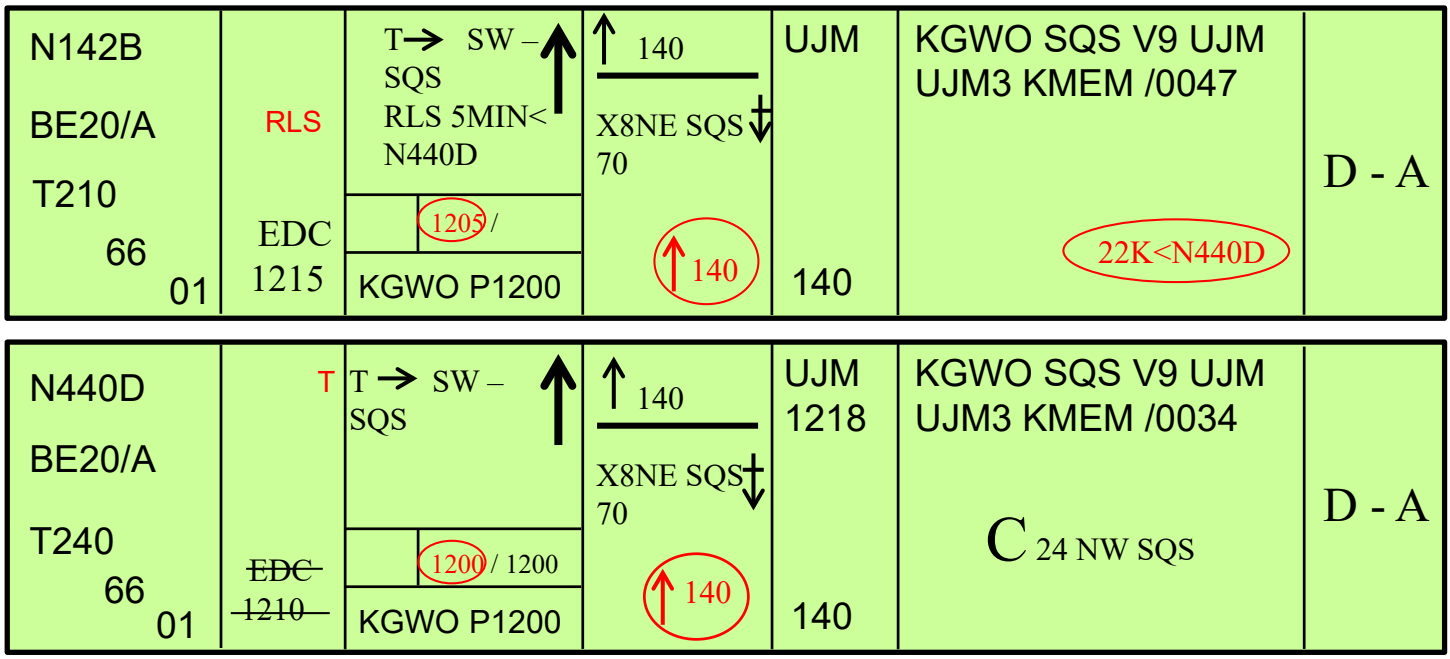
• Two aircraft proposed at the same time and tower calls for both clearances, the student must use a reduce standard separation rule if it is available.

• Two aircraft in the suspense bay with 10 minutes or less between their proposed departure time, student can "anticipate" and use depart SW direct SQS.

• Two aircraft in suspense bay with more than 10 mins. between their proposed departure times, the student cannot use depart SW direct SQS.

DEPARTURES (cont'd)

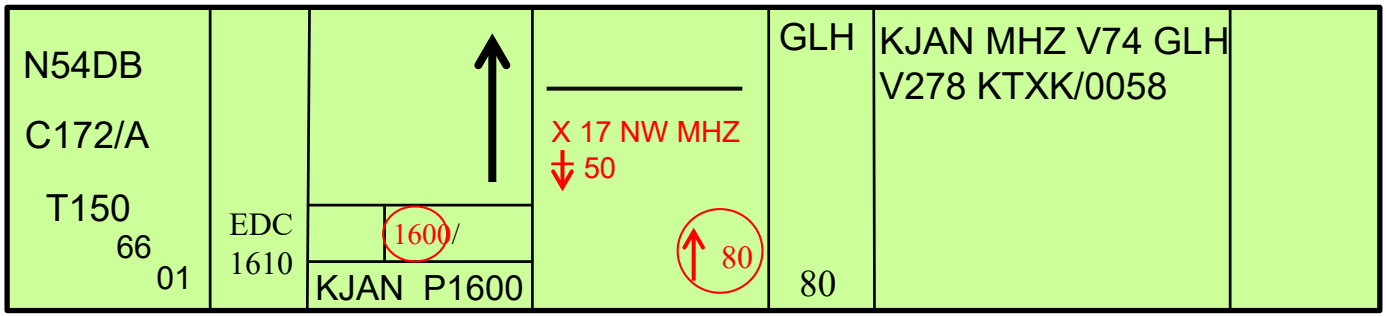
KGWO Stripmarking and Phraseology (cont'd)



- Coordination with Sector 15
  - D66: "In Suspense, King Air One Four Two Bravo Assumed Greenwood Departure One Two Zero Five, Climbing to One Four Thousand. Using the Twenty Two Knot Rule in Trail of November Four Four Zero Delta.
- Departure Clearance 22-Knot Rule
  - D66: "King Air One Four Two Bravo, Cleared to Memphis Airport via Depart Southwest Direct Sidon as Filed, Cross Eight Miles Northeast Sidon VORTAC At or Below Seven Thousand, Climb and Maintain One Four Thousand. King Air One Four Two Bravo Released Five Minutes after November Four Four Zero Delta Departs."

DEPARTURES (cont'd)

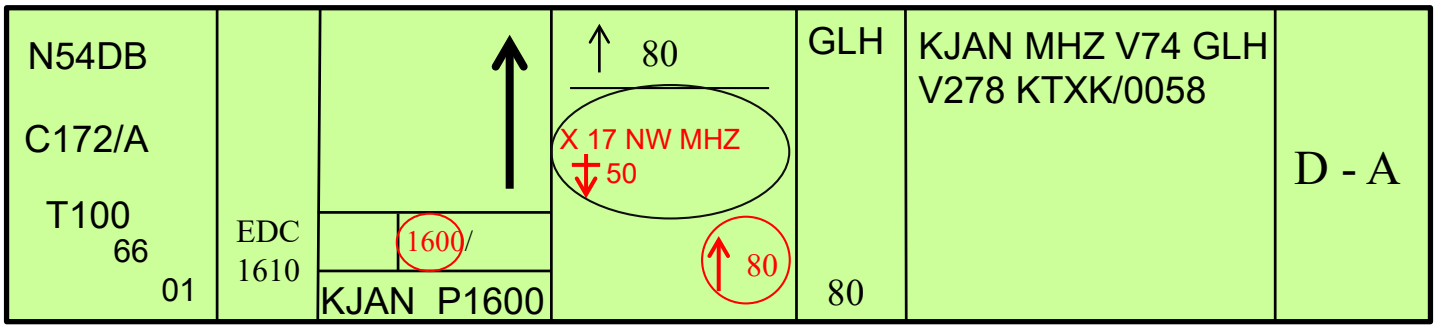
Jackson (KJAN) Stripmarking and Phraseology



- Departure Request
  - JAN: "Jackson Low, Jackson Approach."
  - D66: "Jackson Low."
  - JAN: "Request Clearance Skyhawk Five Four Delta Bravo to the Texarkana Airport."
  - D66: "Skyhawk Five Four Delta Bravo Expect Departure Clearance One Six One Zero. J-S."
  - JAN: "H-A."
- APREQ
  - D66: "D Sixty-Seven, D Sixty-Six APREQ."
  - D67: "D Sixty-Seven."
  - D66: "In Suspense, Skyhawk Five Four Delta Bravo, Assumed Jackson Departure One Six Zero Zero, Climbing to Eight Thousand."
  - D67: "Skyhawk Five Four Delta Bravo Climbing to Eight Thousand Approved. B-D."
  - D66: "J-S."

DEPARTURES (cont'd)

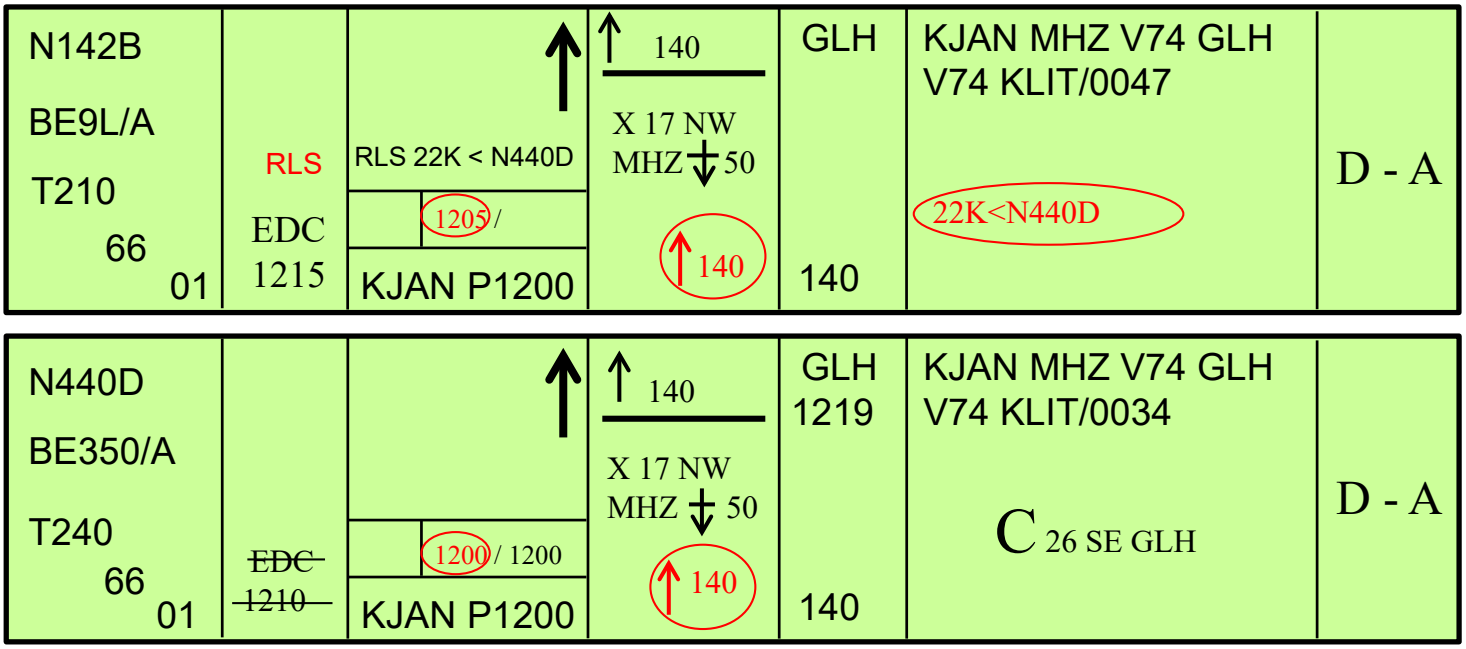
Jackson (KJAN) Stripmarking and Phraseology (cont'd)



- Departure Clearance
  - D66: "Jackson Approach, Jackson Low, Clearance."
  - JAN: "Jackson Approach."
  - D66: "Skyhawk Five Four Delta Bravo Cleared to Texarkana Airport via Victor Seventy Four Greenville as Filed, Cross One Seven Miles Northwest Magnolia VORTAC at or Below Five Thousand, Climb and Maintain Eight Thousand."
  - JAN: "H-A."
  - D66: "J-S."

DEPARTURES (cont'd)

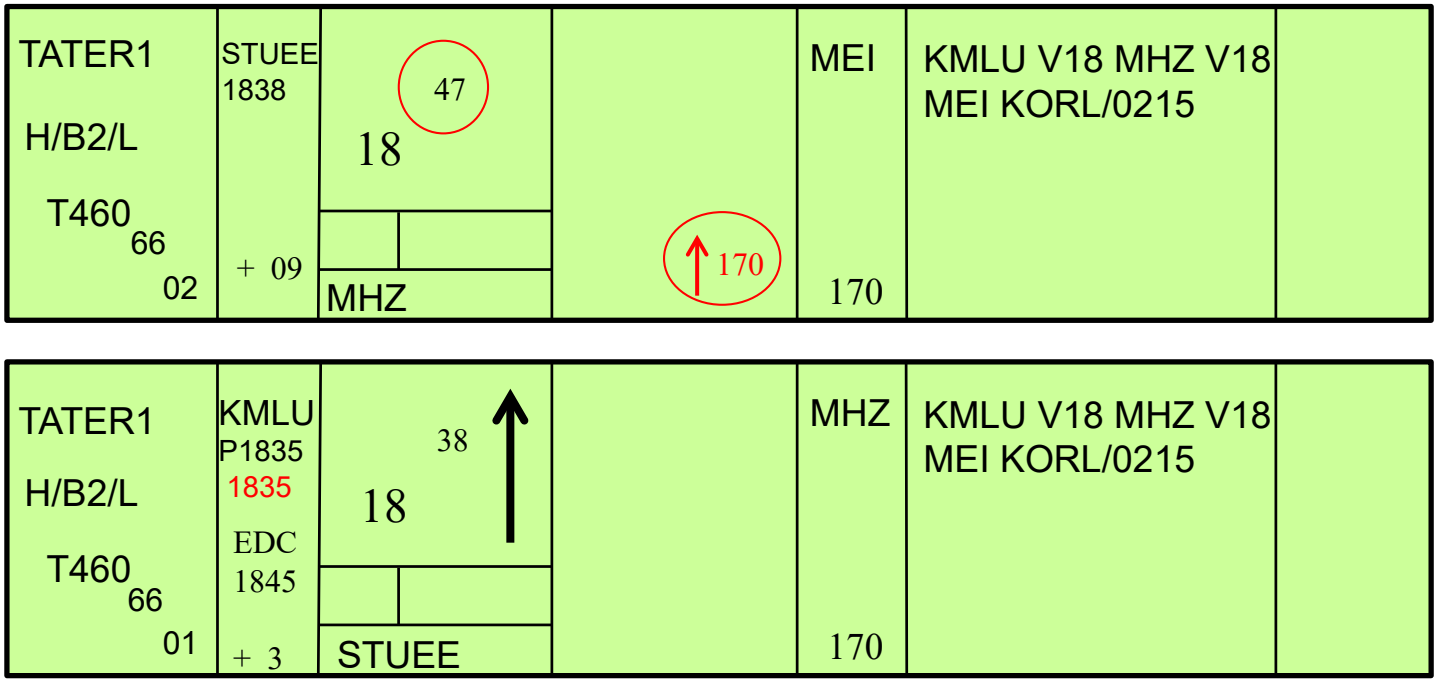
Jackson (KJAN) Stripmarking and Phraseology (cont'd)



- Departure Clearance 22-Knot Rule
  - D66: "King Air One Four Two Bravo, Cleared to Little Rock Airport via Victor Seventy Four Greenville as Filed, Cross One Seven Miles Northwest Magnolia VORTAC At or Below Five Thousand, Climb and Maintain One Four Thousand. King Air One Four Two Bravo, Released Using the Twenty-Two Knot Rule in Trail of King Air Four Four Zero Delta."

DEPARTURES (cont'd)

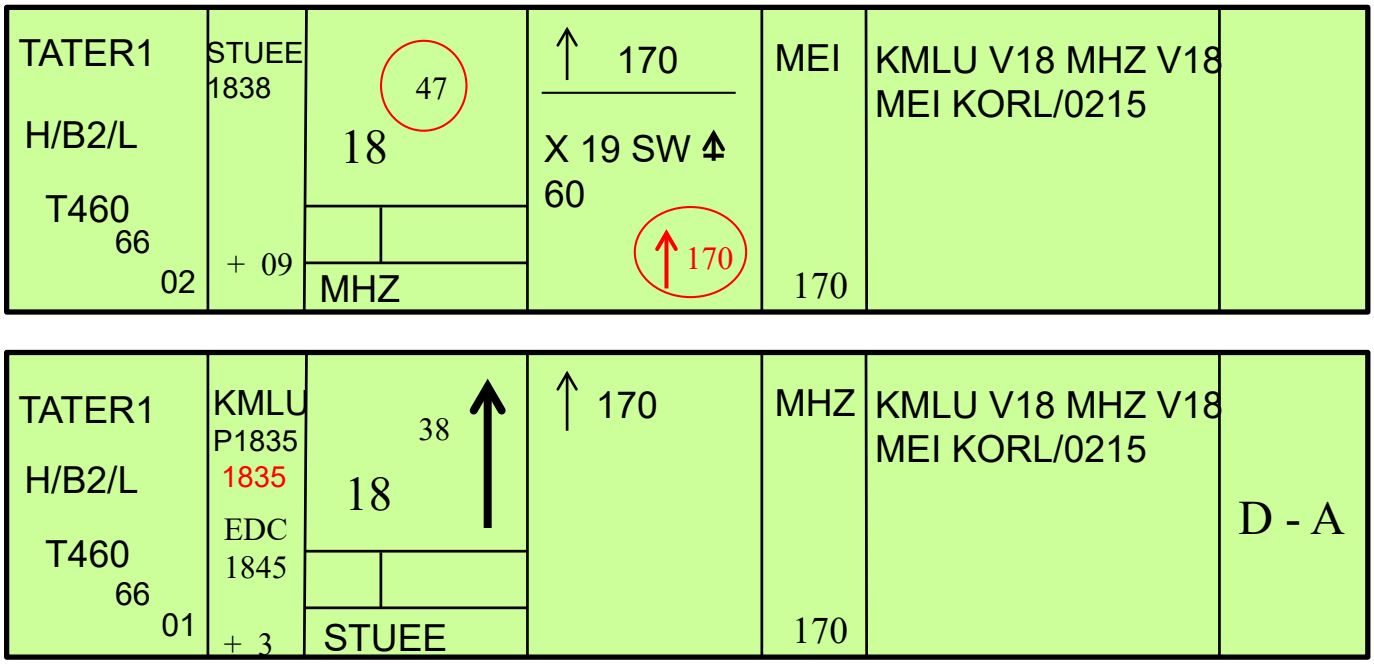
Monroe (KMLU) Stripmarking and Phraseology



- Departure Request
  - MLU: "Jackson Low, Monroe Approach."
  - D66: "Jackson Low."
  - MLU: "Request Clearance TATER One to Orlando Executive Airport."
  - D66: "TATER One Expect Departure Clearance One Eight Four Five. K-H."
  - MLU: "L-P."
- APREQ
  - D66: "D Sixty-Five, D Sixty-Six. APREQ."
  - D65: "D Sixty-Five."
  - D66: "In Suspense, TATER One Estimated Magnolia VORTAC One Eight Four Seven, Climbing to One Seven Thousand."
  - D65: "TATER ONE, Approved, as requested. M-I."
  - D66: "K-H."

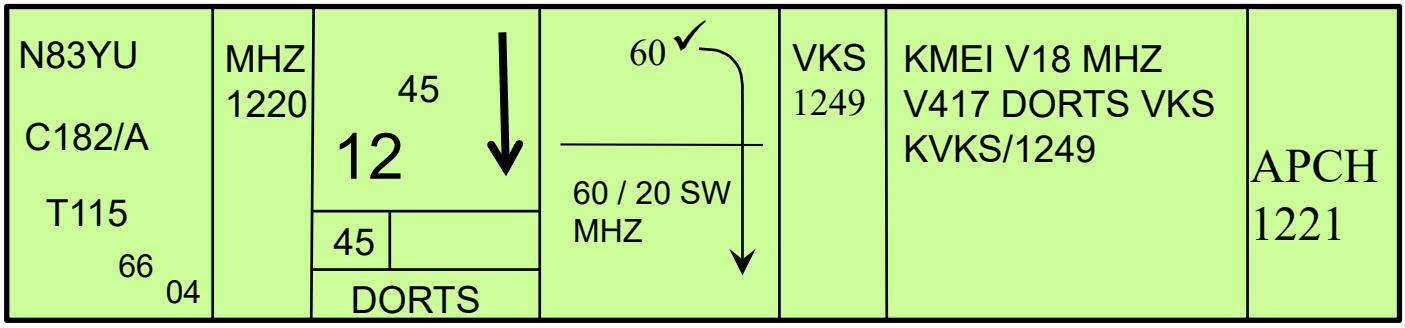
DEPARTURES (cont'd)

Monroe (KMLU) Stripmarking and Phraseology (cont'd)



- Departure Clearance
  - D66: "Monroe Approach, Jackson Low."
  - MLU: "Monroe Approach."
  - D66: "Clearance TATER One, (pause wait for acknowledgement), TATER One Cleared to Orlando Executive Airport via Victor Eighteen Magnolia as Filed. Cross One Niner Miles Southwest Magnolia VORTAC At or Above Six Thousand, Climb and Maintain One Seven Thousand."
  - MLU: "L-P."
  - D66: "K-H."

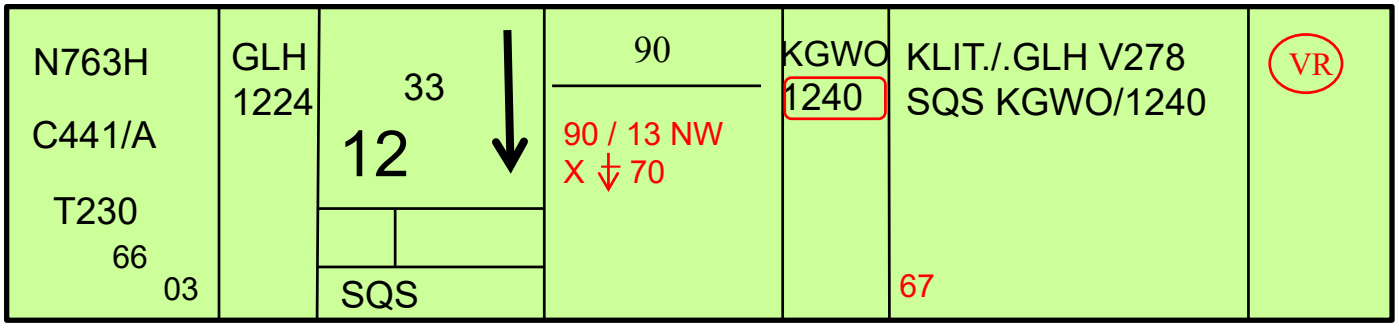
ARRIVALS



Vicksburg (KVKS) Stripmarking and Phraseology

- Approach Clearance
  - D66: "November Eight Three Yankee Uniform, Maintain Six Thousand until Two Zero Miles Southwest Magnolia VORTAC, Cleared Approach Vicksburg Airport"

NOTE: the restriction does not have to be on this strip

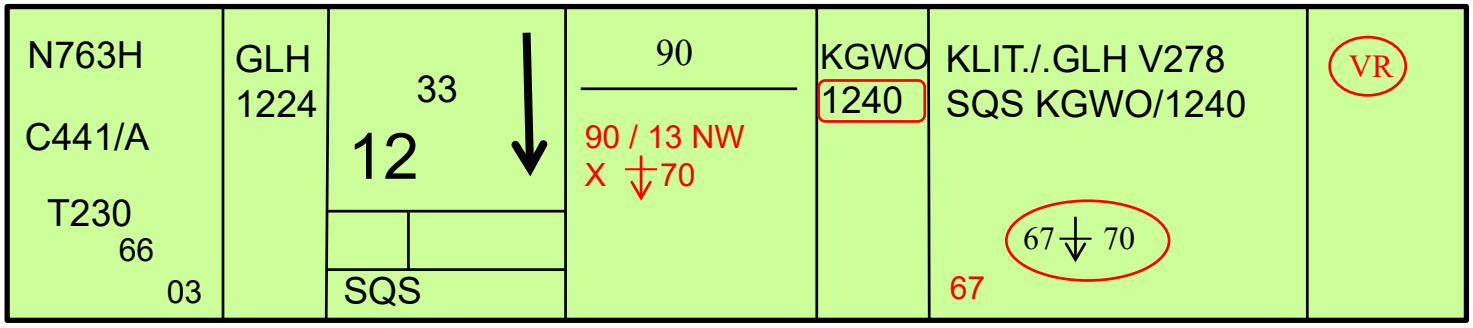


Greenwood (KGWO) Stripmarking and Phraseology

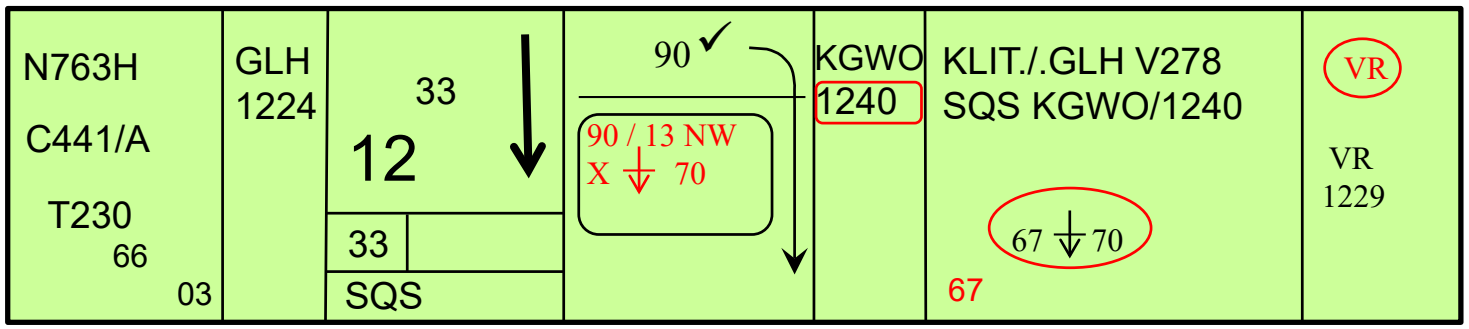
- Inbound Coordination
  - D66: "Greenwood Tower, Jackson Low, Inbound."
  - GWO: "Greenwood Tower
  - D66: "Conquest Seven Six Three Hotel, Cessna Four Forty-one, Estimated Greenwood Airport One Two Four Zero, for VOR Approach."
  - GWO: "L-W."
  - D66: "B-P."

ARRIVALS (cont'd)

Greenwood (GWO) Stripmarking and Phraseology (cont'd)



- Coordination with Sector 67 to block airspace
  - D66: "D Sixty-Seven, D Sixty-Six, APREQ."
  - D67: "D Sixty-Seven."
  - D66: "Block Seven Thousand And Below for Holding and Approach at Sidon."
  - D67: "Approved as requested, G-T."
  - D66: "B-P."



- Approach Clearance
  - D66: "Conquest Seven Six Three Hotel, Maintain Niner Thousand Until One Three Miles Northwest Sidon VORTAC, Cross Sidon VORTAC At or Below Seven Thousand, Cleared VOR Runway Five Approach Circle to Runway Two Three."

ARRIVALS (cont'd)

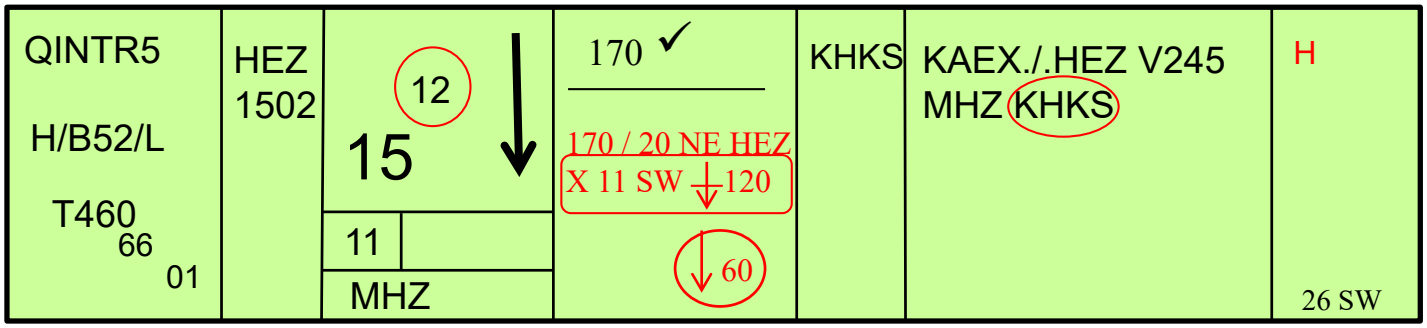
AAL121 B727/A T440 66 05	SQS 1502	11 15 MHZ	150 ✓ X 9 NW @ 60 60	KJAN	KMEM./.UJM V9 MHZ KJAN	H 17NW / V9
AAL121 B727/A T440 66 04	UJM 1453	02 15 02 SQS	150 ✓	MHZ	KMEM./.UJM V9 MHZ KJAN	

Jackson (KJAN) Stripmarking and Phraseology

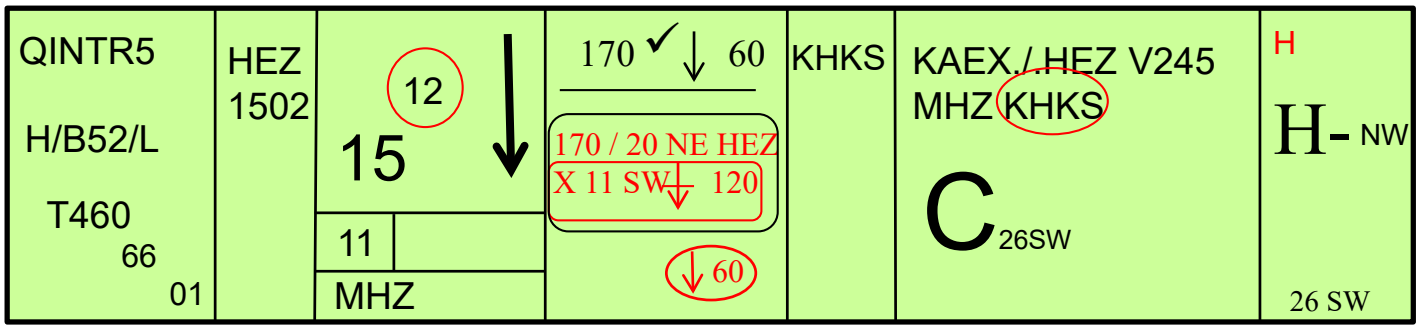
- Inbound coordination
  - D66: "Jackson Approach, Jackson Low, Inbound."
  - JAN: "Jackson Approach."
  - D66: "American One Twenty-One, Boeing Seven Twenty-seven Slant Alfa, Estimated Magnolia VORTAC One Five One One, Descending to Six Thousand With a Restriction to Cross Niner Miles Northwest Magnolia VORTAC at and Maintain Six Thousand, Your Control One Seven Miles Northwest Magnolia VORTAC on Victor Niner."
  - JAN: "O-L."
  - D66: "B-T."

ARRIVALS (cont'd)

Jackson (KJAN) Stripmarking and Phraseology



- Landing HKS or JVW Coordination
    - D66: "Inbound (wait for acknowledgement), QINTR Five, Heavy B Fifty Two Slant Lima, Estimated Magnolia VORTAC One Five One Two, Descending to Six Thousand With a Restriction to Cross One One Miles Southwest Magnolia VORTAC At or Below One Two Thousand, Landing HAWKINS Field airport, Your Control Two Six Miles Southwest Magnolia VORTAC."



- Clearance
    - QINTR Five, Cleared to Magnolia VORTAC, Maintain One Seven Thousand Until Two Zero Miles Northeast Natchez VOR/DME, Cross One One Miles Southwest Magnolia VORTAC At or Below One Two Thousand Descend and Maintain Six Thousand. Hold Northwest as Published, no Delay Expected. Contact Jackson Approach One One Niner Point Two or Two Five Niner Point Two, Two Six Miles Southwest Magnolia VORTAC."

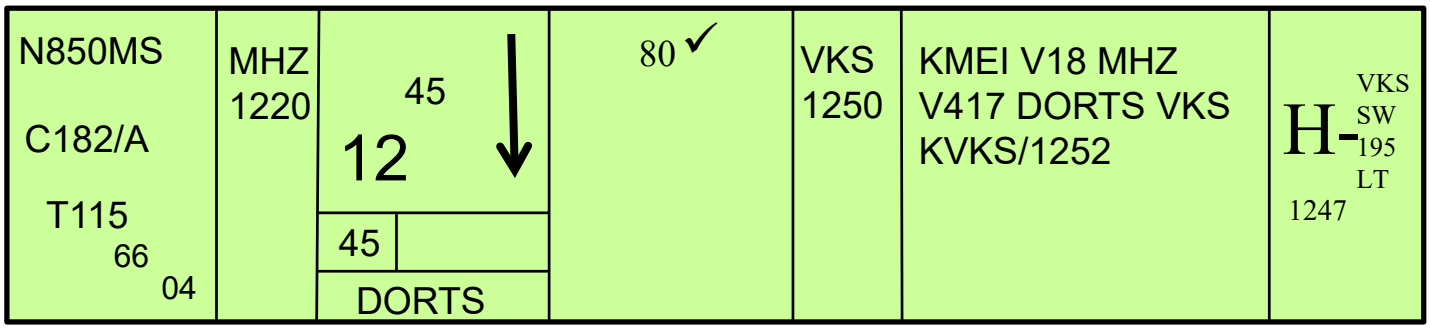
ARRIVALS (cont'd)

ENY712 SW4/A T260 66 07	MHZ 1420	~~39~~ 14 35 STUEEDINKY	160✓ 70	MLU	KATL V18 MLU KMLU	H DINKY
ENY712 SW4/A T260 66 06	MEI 1401	20 14 19 MHZ	160✓	~~STUEE~~ DINKY	KATL V18 MLU KMLU	

Monroe (KMLU) Stripmarking and Phraseology

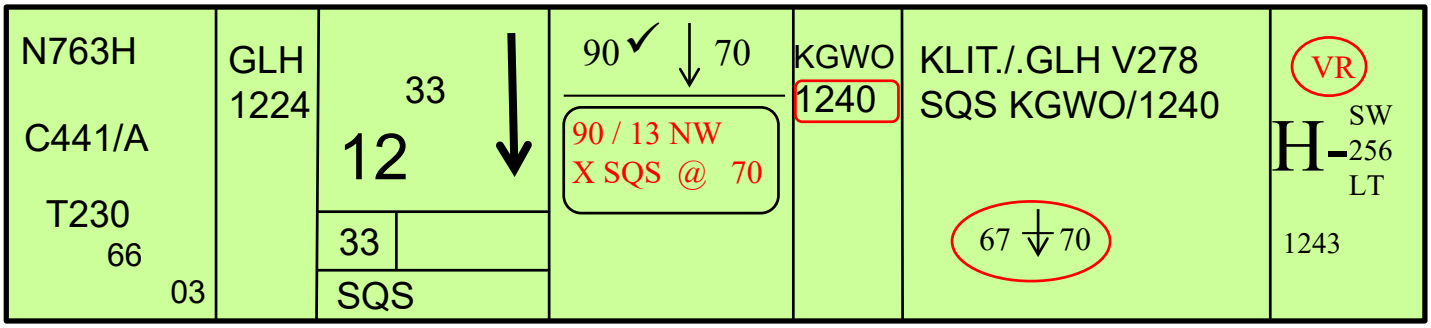
- Inbound Coordination
  - D66: "Monroe Approach, Jackson Low, Inbound
  - MLU: "Monroe Approach."
  - D66: "Envoy Seven Twelve, S-W Four Slant Alfa, Estimated DINKY Intersection One Four Three Five, Descending to Seven Thousand. Your Control DINKY."
  - MLU: "A-E."
  - D66: "S-T."

HOLDING



Vicksburg (KVKS) Stripmarking and Phraseology

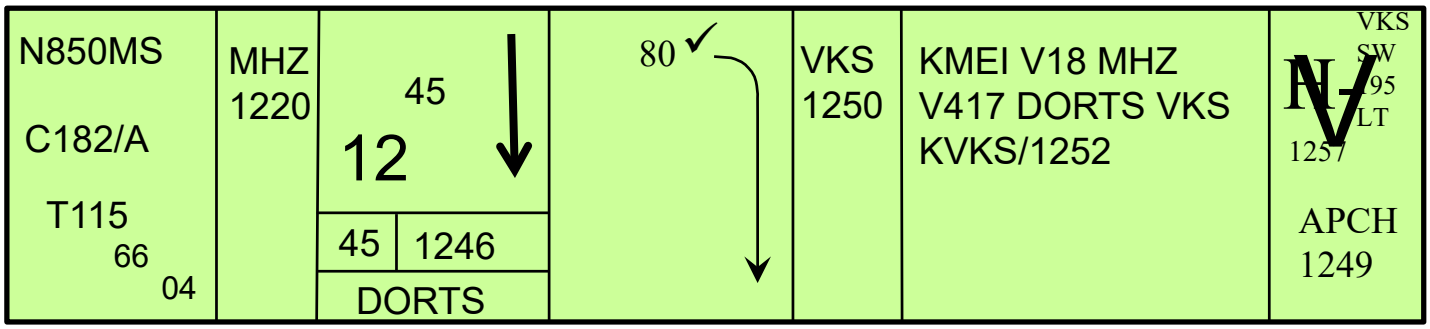
- D66: "Skylane Eight Five Zero Mike Sierra Cleared to Vicksburg RADIO BEACON. Hold Southwest on the One Niner Five Bearing From the Vicksburg RADIO BEACON, Left Turns, Expect Further Clearance One Two Four Seven."



Greenwood (KGWO) Stripmarking and Phraseology

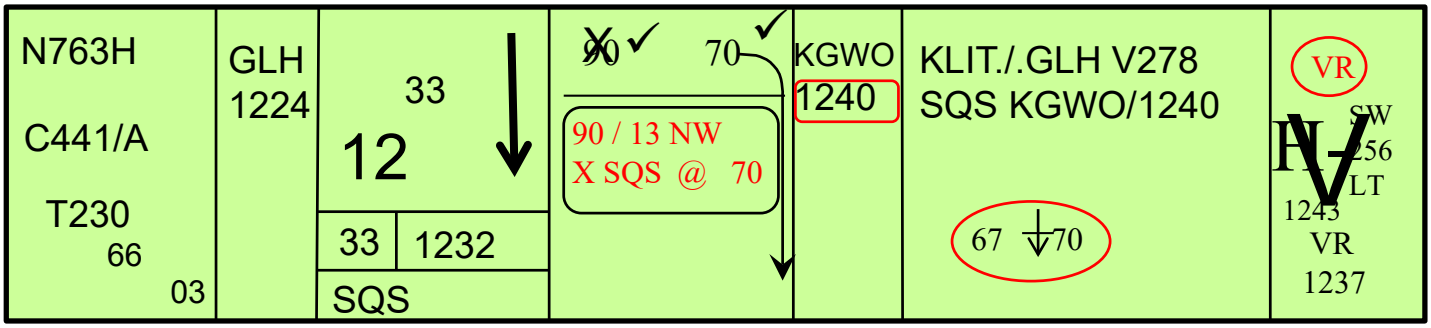
- D66: "Conquest Seven Six Three Hotel, Cleared to Sidon VORTAC, Maintain Niner Thousand Until One Three Miles Northwest Sidon VORTAC, Cross Sidon VORTAC At and Maintain Seven Thousand, Hold Southwest on the Two Five Six Radial, Left Turns Expect Further Clearance One Two Four Three."

HOLDING CONT'D



Vicksburg (KVKS) Stripmarking and Phraseology

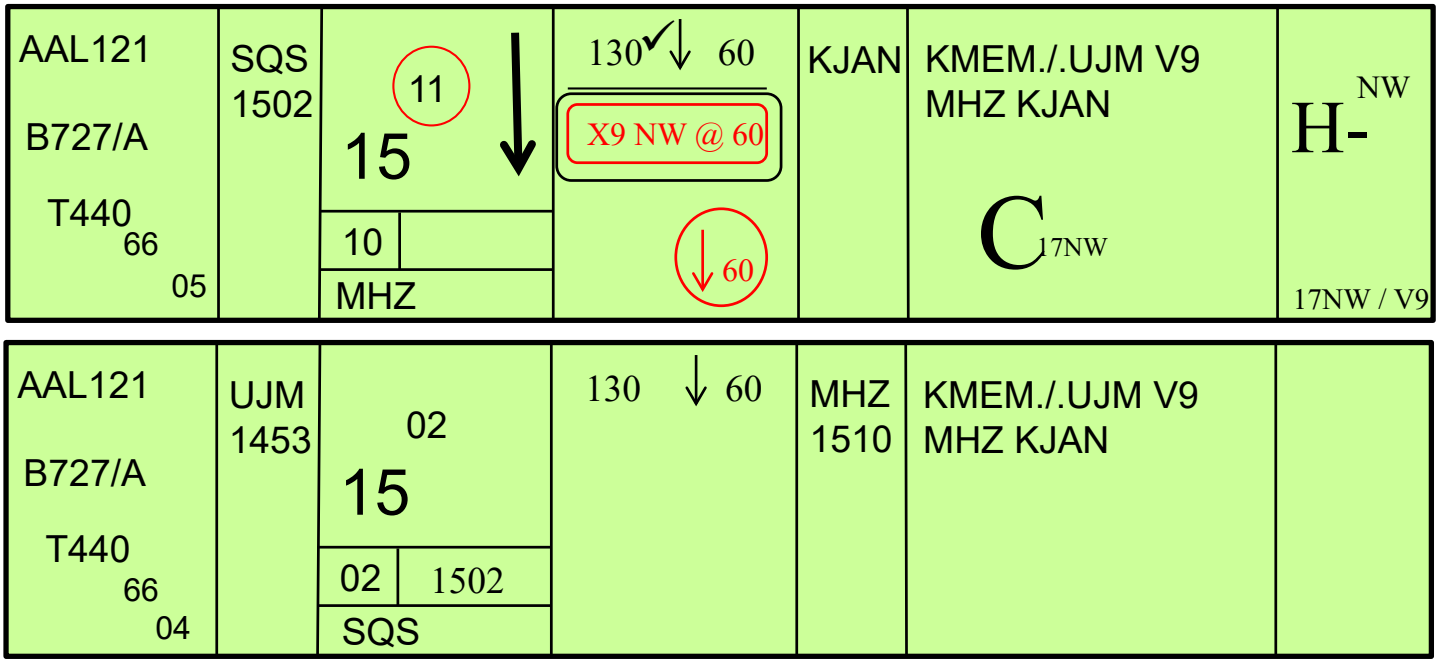
- Departure has reported clear of protected airspace or previous arrival has landed and N850MS is now cleared for approach.



Greenwood (KGWO) Stripmarking and Phraseology

- Departure has reported clear of protected airspace or previous arrival has landed and N763H is now cleared for approach.

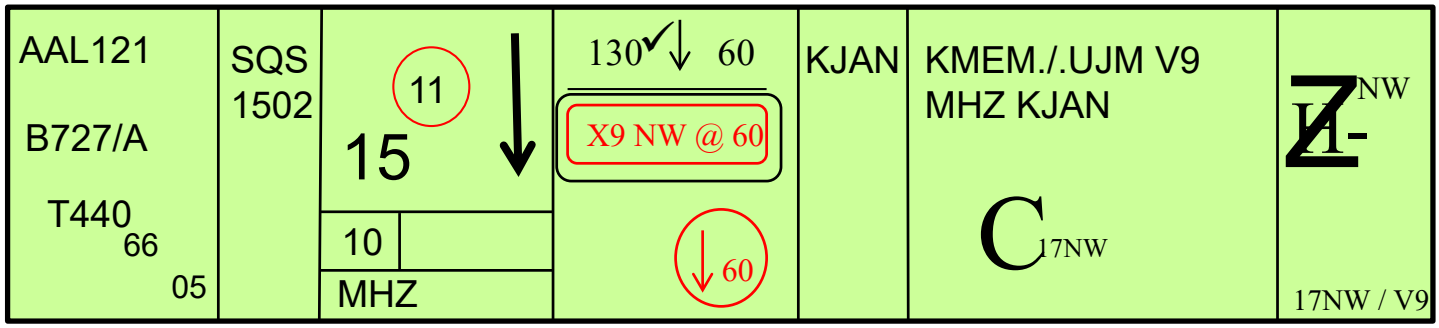
HOLDING (CONT'D)



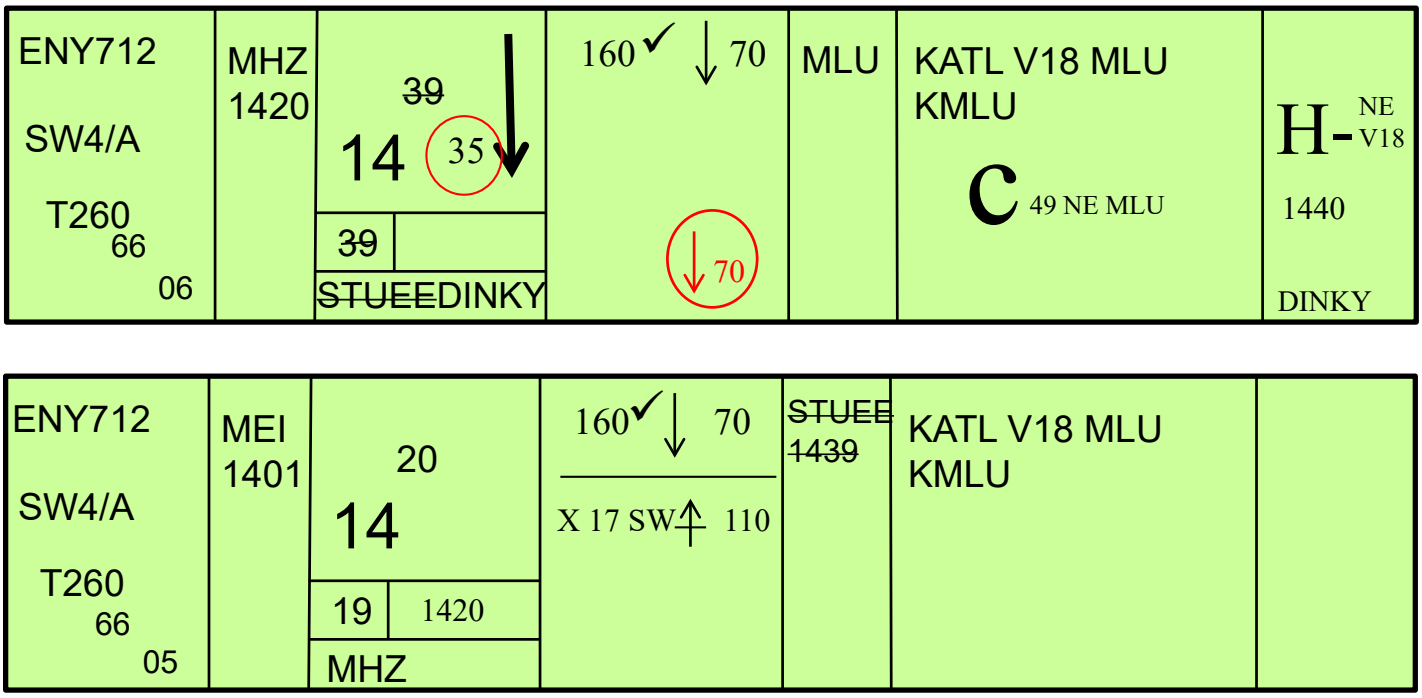
Jackson (KJAN) Stripmarking and Phraseology

- D66: "American One Twenty-one Cleared to Magnolia VORTAC, Cross Niner Miles Northwest Magnolia VORTAC At and Maintain Six Thousand, Hold Northwest as Published, no Delay Expected. Contact Jackson Approach One One Niner Point Two, One Seven Miles Northwest Magnolia VORTAC."

Tower Jurisdiction



HOLDING (CONT'D)



Monroe (KMLU) Stripmarking and Phraseology

- D66: "Envoy Seven Twelve, Cleared to DINKY Intersection. Cross One Seven Miles Southwest Magnolia VORTAC At or Above One One Thousand, Descend and Maintain Seven Thousand. Hold Northeast on Victor Eighteen, Expect Further Clearance One Four Four Zero. Contact Monroe Approach One One Eight Point Two, Four Niner Miles Northeast Monroe VORTAC."

OTHER COORDINATIONS

UAL412 B733/L T410 G425 66 **015** 04	SQS 1110	19 11 MHZ	160✓	HEZ R	KMEM V9 MHZ V245 HEZ KBTR	2534 **ZHU**

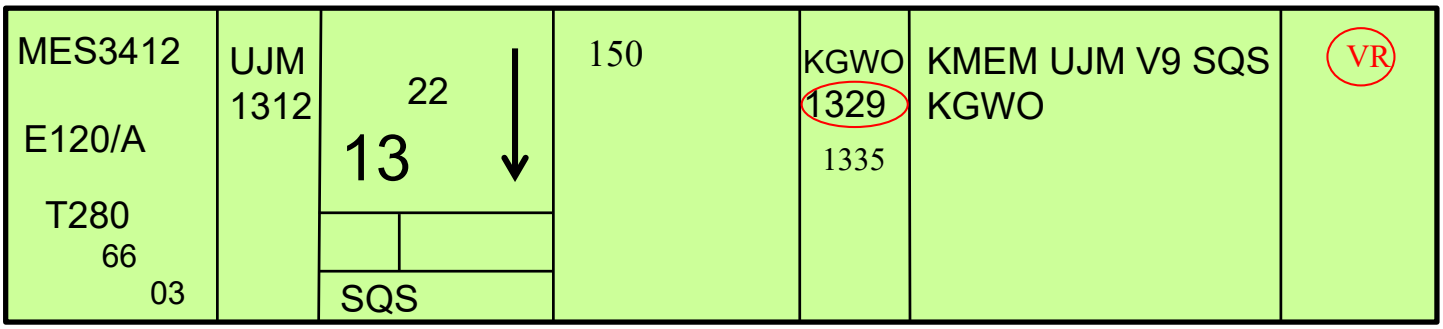
Manual Coordination of a Flight Plan in ERAM Lab

- D66: “Polk Low, Jackson Low, Flight Plan.”
- ZHU40: “Polk Low.”
- D66: United Four Twelve, Boeing Seven Thirty-three Slant Lima, True Airspeed Four One Zero, Estimated Magnolia VORTAC One One One Niner, One Six Thousand Departed Memphis, Magnolia, Victor Two Forty-five Natchez Direct Baton Rouge, Code Two Five Three Four."
- ZHU40: “T-L.”
- D66: “B-P.”

UAL412 B733/L T410 G425 66 **015** 04	SQS 1110	19 11 MHZ	160✓	HEZ R	KMEM V9 MHZ V245 HEZ KBTR	2534 **ZHU**

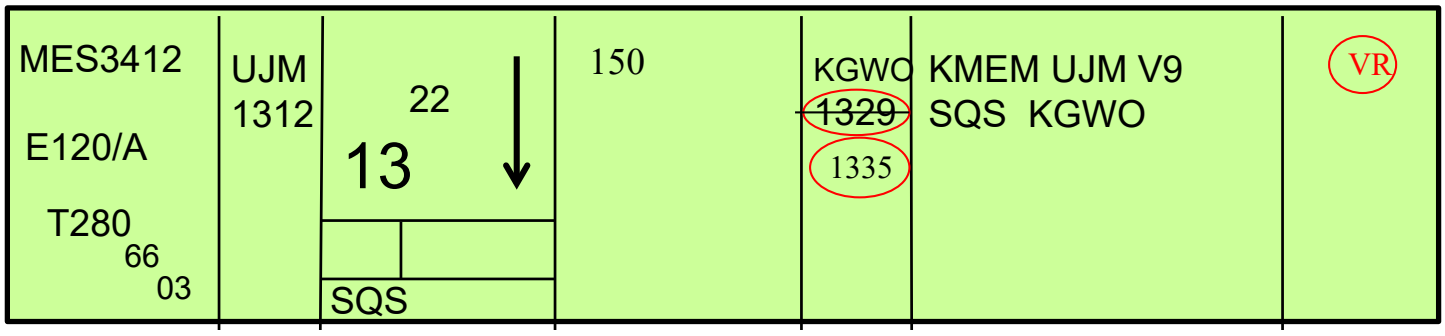
NOTE: This is an example of manually passing a flight plan in either a Radar or Nonradar environment. If this strip was used in the radar lab it would have the R (for radar contact) and the beacon code as shown here.

OTHER COORDINATIONS (cont'd)



Revised Estimate

- D66: "Greenwood Tower, Jackson Low."
- GWO: "Greenwood Tower."
- D66: "Mesaba Thirty-four Twelve, Revised Greenwood Estimate One Three Three Five."
- GWO: "R-M."
- D66: "B-G."



OTHER COORDINATIONS (cont'd)

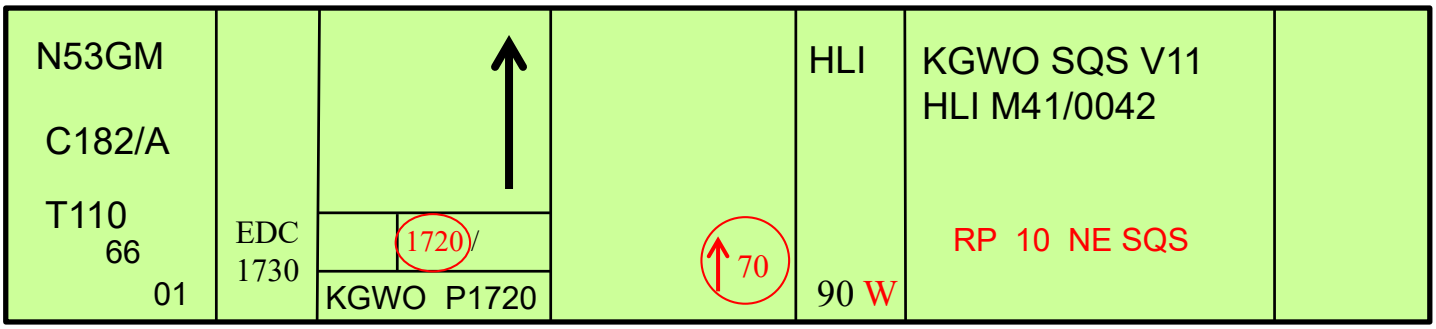
N486PB C650/A T420 66 04	IGB 0111	24 01 SQS	100 ↑120	GLH	KGTR IGB V278 KTXK/0155	

Revised Altitude (Aircraft moved for traffic)

- D66: "D Sixty-Seven, D Sixty-Six APREQ."
- D67: "D Sixty-Seven."
- D66: "At Greenville, Citation Four Eight Six Papa Bravo Revised Altitude, Climbing to One Two Thousand."
- D67: "Citation Four Eight Six Papa Bravo, Approved as Requested. C-G."
- D66: "B-G."

N486PB C650/A T420 66 04	IGB 0111	24 01 SQS	100 ↑120	GLH	KGTR IGB V278 KTXK/0155	

OTHER COORDINATIONS (cont'd)



Revised Altitude (aircraft stopped below requested final for airspace)

- APREQ
  - D66: "D Twelve, D Sixty-Six APREQ."
  - D12: "D Twelve"
  - D66: "In Suspense, Skylane Five Three Golf Mike, Assumed Greenwood Departure One Seven Two Zero Climbing to Seven Thousand."
  - D12: "November Five Three Golf Mike Climbing to Seven Thousand Approved. H-R."
  - D66: "L-P."

Note: When the clearance is given to Greenwood Tower, the statement "Niner Thousand is not available" must follow altitude restrictions and final altitude. The conflict has been resolved, and the W should be lined through. The pilot's requested altitude will only be crossed out if the pilot requests a new final altitude, which would be written in space 24, black, and above the old final if present.

OTHER COORDINATIONS (cont'd)

UAL311 DC9/A T450 66 04	SQS 0031	41 00 MHZ	160	MCB	KMEM V9 MCB KMSY MHZ V555	**ZHU**

Revised Routing

- D66: "Picayune Low, Jackson Low."
- ZHU30: "Picayune Low."
- D66: "At McComb, Continental Three Eleven Revised Route, Magnolia Victor Five Fifty-five McComb."
- ZHU30: "C-T."
- D66: "M-M."

UAL311 DC9/A T450 66 04	SQS 0031	41 00 MHZ	160	MCB	KMEM V9 MCB KMSY MHZ V555	**ZHU**

MISCELLANEOUS PHRASEOLOGY

Procedures

➢ To request control and communication of an aircraft from another facility/sector:

- "AT (fix), (ACID) REQUEST CONTROL."

Or

- "AT (fix), (ACID) REQUEST COMMUNICATIONS AND CONTROL."

✈ Suggested Phraseology

➢ Refer to yourself as:

- "Jackson Low" to other facilities (ZHU, ZFW, JAN APCH, GWO TOWER, FSS)
- "D Sixty-Six" to other sectors in ZAE

Example: "D Sixty-Seven, D Sixty-Six, APREQ."

Procedures

➢ Before instructing an aircraft arriving at an airport not served by an air traffic control tower or FSS to change to the common traffic advisory frequency, provide the pilot with instructions on how to cancel IFR.

The airports in sector 66 that need this procedure are KVKS, 0M8, and KTVR.

✈ Suggested Phraseology

- "November Eight Five Zero Mike Sierra Cleared Approach Vicksburg Airport, Report Cancellation of IFR This Frequency or With Aero Center Flight Data, Change to Advisory Frequency Approved."

Procedures

To respond to a pilot's cancellation of IFR on your frequency

✈ Suggested Phraseology

- "November Eight Five Zero Mike Sierra IFR Cancellation Received."

MISCELLANEOUS PHRASEOLOGY (cont'd)

Procedures

➢ To Obtain a DME position:

✈ **Suggested Phraseology**

- "(ACID) say position" or "(ACID) say DME from (FIX)."

Procedures

➢ Coordination phraseology to another sector/facility for departure aircraft:

✈ **Suggested Phraseology**

- D66: "D Sixty-Seven, D Sixty-Six, APREQ"
- D67: "D Sixty-Seven."
- D66: "In Suspense (ACID*),* Assumed (AIRPORT) Departure (time) (altitude and any appropriate restrictions) (revised route if necessary)."
    - Do **not** give a FIX after "In Suspense"

RADAR
DEPARTURES

KVKS and 0M8 Stripmarking

Your departure clearance will usually contain an “expect higher altitude one zero minutes after departure”, which is marked in space 24 overflowing into space 26.

N53G BE60/A T210 66 **022** 01		↑ V<1225(30) 1219 KVKS P1218	↑ 40	HEZ (120	KVKS VKS HEZ V245 AEX KHOU 10<D)	5162 D - A **ZHU**

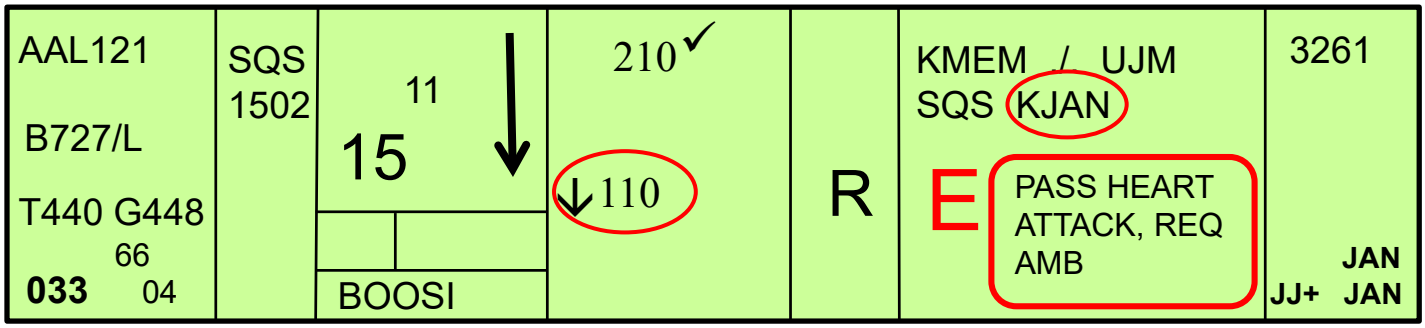
N121G C172/A T110 66 **026** 01		↑ V<1225(30) 1217 0M8 P1218	↑40	MHZ (070	0M8 BLE MHZ V18 KMEI 10<D)	5214 D - A

KGWO Stripmarking

After receiving the departure message from the computer or printer, record the four digit time on the strip in space 18 and circle it in red.

N568TT C182/A T120 66 **125** 01		↑ 1449 KGWO P1450	↑ 40	MHZ 080	KGWO SQS V9 MCB KNEW	2534 D - A **ZHU**

RADAR
EMERGENCIES



Emergency Stripmarking

- Once a strip on the aircraft is available, mark a large red “E” in space 26 followed by the nature of the emergency and any pilot request. When you coordinate this information the nature of the emergency and pilot’s request are circled in red.
- Normally with this particular type of emergency, an APREQ with JAN approach “direct to the airport” recorded in space 25 (KJAN circled in red), “descending to 110” recorded in space 20 (110 circled in red) with no speed restrictions. This coordination would help the pilot get to the airport with minimal delay.

Note: In ERAM scenarios (during special circumstances such as emergencies), the student may use the printed strip in lieu of ACL entries to indicate all required coordination has been completed.

RADAR
MILITARY CHANGE OF DESTINATION

SNAKE5 C130/P T350 G361 66 **018** 03	MEM 0027	41 00 MHZ270010	230 ✓	MCB 0102 R	KCBM./.MEM MCB ABI KLSV	5251 **ZHU**

ORIGINAL STRIP

Military Reroute (Radar)

- D66: Dials FSS
- GWO FSS: "Greenwood Radio."
- D66: "Jackson Low, Military Change of Destination, wait for acknowledgement, Snake Five, C One Thirty, Departed Columbus Air Force Base, Original Destination Nellis Air Force Base, Position One Zero Miles West of Magnolia VORTAC at Zero Zero Four One, New Destination Keesler Air Force Base, Estimated Time of Arrival Zero One One Five Zulu, Fuel Exhaustion Time Zero Four TwoThree."
- GWO FSS: "S-S."
- D66: "E-L."

ORIGINAL STRIP USED

SNAKE5 C130/P T350 G361 66 **018** 03	MEM 0027	41 00 MHZ270010	230✓	MCB 0102 R	KCBM./.MEM ~~MCB ABI KLSV~~ Fuel 3+45 KBIX Time 0038 ETA 0115 FET 0423	5251 **ZHU**

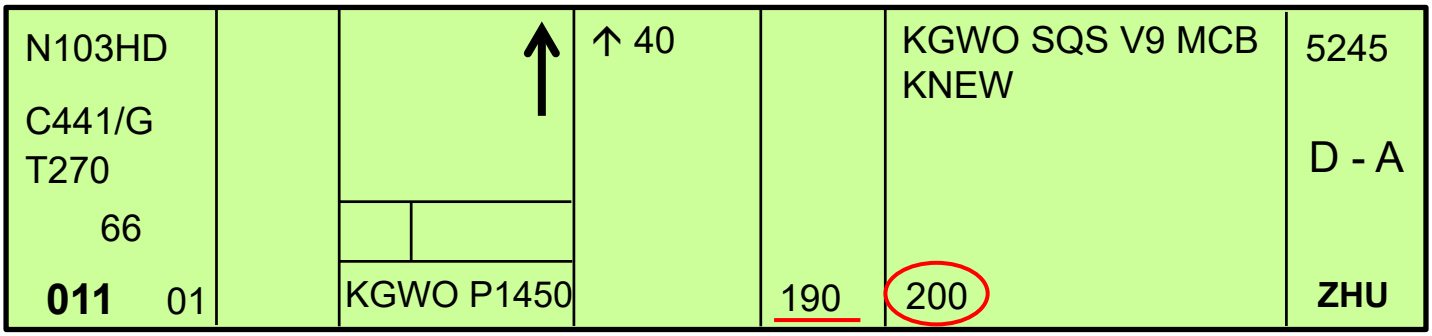
STRIP AFTER REROUTE USED

SNAKE5 C130/P T350 G361 66 **018** 03	MEM 0027	38 00 MHZ355025	230 ✓	R	KCBM./.MEM MHZ345025 KBIX ~~KLSV~~ ETA 0115 FET 0423 Fuel 3+45	5251 **ZHU**

NOTE: When coordinating the position of the military, change to Radio, state one of the following:
1.) Mileage & Direction from nearest NAVAID (Ex: One Zero Miles West of Magnolia VORTAC).
2.) A Fix Radial Distance obtained from a flight strip (Ex: Magnolia Two Seven Zero Zero One Zero).
3.) The NAVAID if within 5 miles (Magnolia VORTAC).

RADAR
MISCELLANEOUS

Expect Higher Altitude Different than the Requested Altitude.

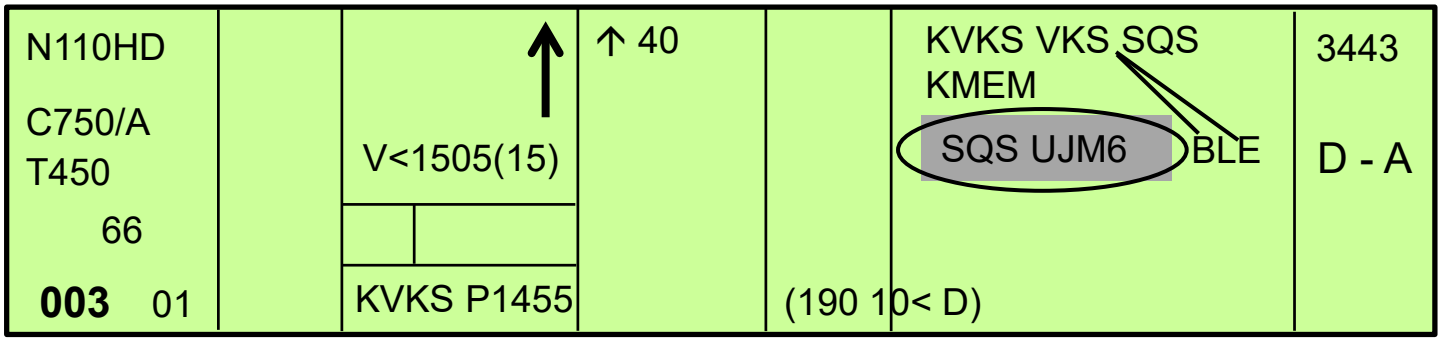


- GWO Tower has been issued the following release information:

"Conquest One Zero Three Hotel Delta, Released Maintain Four Thousand, Expect Flight Level Two Zero Zero as a Final, Flight Level One Niner Zero is Not Available"

Note: The altitude 200 and alternate instructions are recorded in space 26 (200 was not assigned.) The red circle indicates the altitude has been coordinated (entered into the computer).

ERT Routing Issued in a Departure Clearance.



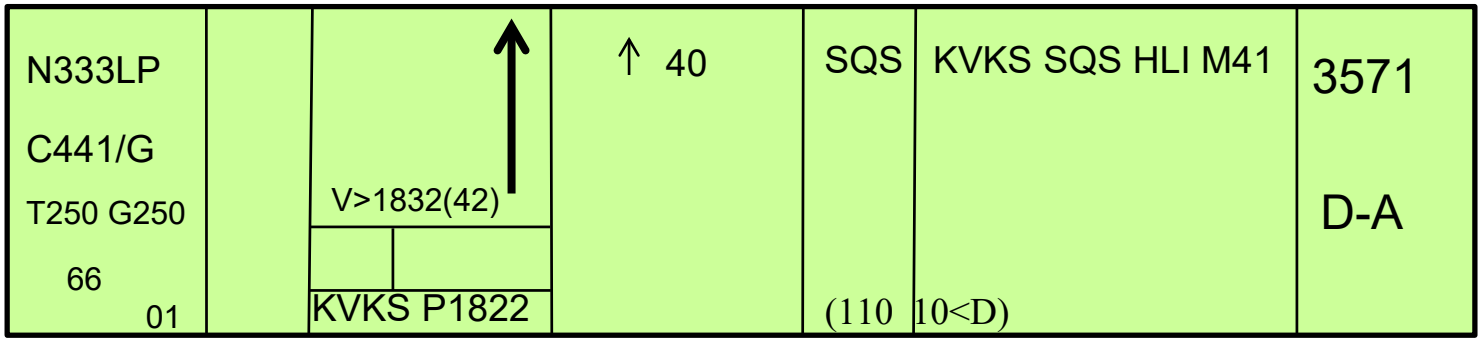
- ZAE FDU has been issued the following clearance information:

"Citation One One Zero Hotel Delta Cleared From Vicksburg Airport to the Memphis Airport Via Vicksburg Radio Beacon, Direct Lake Providence , Direct Sidon, Marvel Six Arrival, Climb and Maintain Four Thousand, Expect Flight Level One Niner Zero One Zero Minutes after Departure, Squawk Three Four Four Three" Clearance Void If Not Off by One Five Zero Five. If Not Off by One Five Zero Five, Advise Aero Center Not Later Than One Five One Five of Intentions. Verify This Clearance Will Allow Compliance With Local Traffic Pattern and Terrain or Obstruction Avoidance. "

Note: The ERT routing was issued and since posted strips must be up-to-date, the ERT routing is circled in **black** to show it was issued. The "Send /Acknowledge Route" entry must also be made in the ACL.

RADAR DEPARTURES

VKS Stripmarking and Phraseology



- Departure Request
    - ZAE FDU: “Flight Data, request clearance, Conquest Three Three Three Lima Papa From Vicksburg Airport to Holly Springs Airport.”
    - D66: “Conquest Three Three Three Lima Papa cleared from Vicksburg airport to Holly Springs airport, via direct Sidon, then, as filed, climb and maintain four thousand, expect one one thousand 10 minutes after departure, squawk three five seven one, clearance void if not off by one eight three two, if not off by one eight three two, advise aero center not later than one eight four two of intentions.”
    - ZAE FDU: “Conquest Three Three Three Lima Papa, four thousand, K-D.”
    - D66: “D-C.”

    The student should place the proposal strip in the strip bay when FDU requests clearance.

    After issuing clearance, the student must start a temporary track including the altitude the aircraft has been assigned, and advise the R-Side:

    “Vicksburg departure climbing to four thousand.”

RADAR DEPARTURES (cont'd)

0M8 Stripmarking and Phraseology

N439UM BE20/A T280 G280 66 01		V>1800(10) 0M8 P1750	↑ 40	SQS (130 10<D)	0M8 SQS SGF KSTL	4512 D-A

Departure Request

- ZAE FDU: "Flight Data, request clearance, King Air Four Three Niner Uniform Mike from Byerley Airport to Saint Louis Airport."
- D66: "King Air Four Three Niner Uniform Mike expect departure clearance one eight zero zero, S-T."
- ZAE FDU: "R-R."
- D66: "D sixty seven, D sixty six, APREQ, block four thousand and below for Byerley departure direct Sidon."
- D67: "Block approved, K-M."
- D66: "Flight Data, D Sixty Six, clearance, King Air Four Three Niner Uniform Mike, cleared form Byerley Airport to Saint Louis Airport, via direct Sidon, then, as filed, climb and maintain four thousand, expect one three thousand one zero minutes after departure, squawk four five one two, clearance void if not off by one eight zero zero, if not off by one eight zero zero advise aero center not later than one eight one zero of intentions."
- ZAE FDU: "King Air Four Three Niner Uniform Mike, four thousand, K-M."
- D66: "S-T."

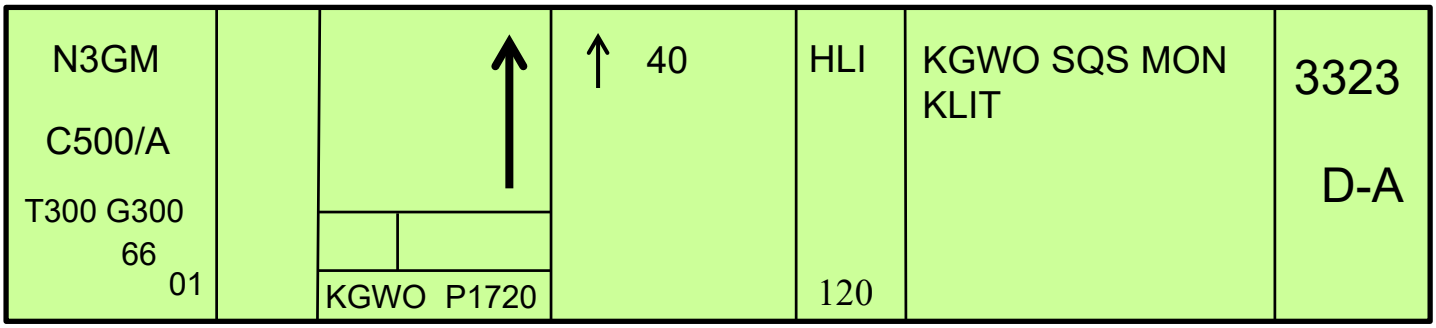
The student should place the proposal strip in the strip bay when FDU requests clearance.

After issuing clearance, student must start temporary track including altitude aircraft has been assigned, and advise R-Side:

"Byerley departure climbing to four thousand."

RADAR DEPARTURES (cont'd)

GWO Stripmarking and Phraseology



- Departure Request
  - GWO: "Jackson Low, Greenwood Tower."
  - D66: "Jackson Low."
  - GWO: "Request release Citation Three Golf Mike to Little Rock Airport."
  - D66: "Citation Three Golf Mike released, maintain four thousand."
    OR "Citation Three Golf Mike released to Little Rock airport, maintain four thousand."
  - GWO: "Citation Three Golf Mike, four thousand J-L."

After release, advise R-Side:

"Greenwood departure climbing to four thousand."