Federal Aviation Administration

Initial En Route Qualification Training

Handout 00
Nonradar Lab Procedures

Course 50148001

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INTRODUCTION

A developmental Air Traffic Control Specialist will have many different Instructors while in training at the Academy. While students may benefit from diverse training methods, skills, and instruction, one obvious drawback is the potential for students to receive conflicting information. Generally speaking, we should be very cautious about using shortcuts or “the way we did it at my facility” instead of “by the book.” Aero Center is a training facility; therefore, standardization of instruction is one of our highest goals. This document has been developed in an effort to provide standardized policies and procedures to be used in the Nonradar lab.

The policies, practices, prohibitions and procedures included in this document are normally found in several different facility documents such as the SOP, AIT, Facility Directives and Letters of Agreement. These items have been assembled here for the convenience of instructors and students.

This document is intended to be used only as a supplement to other official sources such as the JO 7110.65 and letters of agreement with other facilities. Every effort should be made to follow the provisions of this document to help standardize the instruction being delivered to the students from multiple Instructors.

Just as Aero Center is simulated airspace, the LOAs, SOP, and other facility directives are fictitious documents. Students should understand that field facilities will have different policies, procedures and practices. Aero Center does not attempt to teach every possible situation that will be encountered in the field. While many traffic situations could be managed correctly in several different ways, Aero Center preferred methods for dealing with situations included in the training scenarios are discussed here.

One of our goals should be to provide the best possible learning environment to every student, including tailoring instruction to the needs of the individual student. Care should be taken to avoid having these guidelines replace the discretion and good judgment needed to achieve that goal.

The Nonradar scenarios are 30 minutes in duration, the instructor is not allowed to start de-briefing the student until 30 minutes of training time has elapsed.

Suggestions and recommended changes to this document should be forwarded to the course coordinator for review.

Students shall be receptive to training performance feedback from Instructors.

SECTION I - BOARD MANAGEMENT

Sequence Strips

1. Active strips by time, earliest estimated fix time at the bottom, under the proper bay header. If times are identical, the strip with the lowest altitude is sequenced at the bottom.

2. Proposal strips in the suspense bay which is located above the proper bay header and are sequenced with the earliest P Time at the bottom, keeping all strips of a flight together until black times are computed and written on the successive strips.

3. The automated altimeters on the Non-Radar clocks meet the 7110.65 requirement. Students have the option of posting an altimeter strip.

4. Students are not allowed to clear departures out of the suspense/departure bay. The strip must be placed in the active bay prior to issuing the clearance.

5. Never post strips with active traffic that do not have a time and altitude, except when issuing initial departure clearances (for traffic search) or before the start of the scenario.

SECTION II – STRIPMARKING

General

1. All stripmarking must be in accordance with the Aero Center Phraseology and Stripmarking Guide and Lesson Plans.

2. Carry forward all stripmarking and revisions.

   A. A restriction has to be on the strip in the bay where the restriction happens, i.e.,… for a 0M8 departure east bound over MHZ, the restriction to miss JAN Approach has to be written on the strip in the MHZ bay and may be written on the strip in the VKS bay.

3. Red circles around information on the strips must be used to indicate completed coordination.

SECTION II – STRIPMARKING (Cont'd)

General (Cont'd)

4. An IAFDOF altitude must be underlined in red on:

   A. the coordination strip for aircraft leaving the sector.
   B. a departure space 24.

   NOTE: If a flight has multiple postings additional strips may be marked if a segment of flight within that fix posting is IAFDOF.

5. RED Ws

   A. In space 20 of an active strip to indicate a conflict with active traffic, MEA, CBM 3 MOA, and MEI 1 WEST MOA.
   B. In space 24 of a proposal strip to indicate a conflict with CBM 3 MOA, MEI 1 WEST MOA and/or a requested altitude below the MEA.
   C. When resolved are to be lined through.

6. Place Black altitude checkmarks in space 20 on all strips for aircraft in level flight and on frequency.

7. Altimeter checks may be used by placing a black checkmark in one of the spaces 1 thru 10 for aircraft on frequency at the start of a scenario and for aircraft checking on frequency during the scenario if the altimeter is given to the aircraft.

8. Arrival/Departure arrows may be drawn in space 16 using RED or BLACK arrows to highlight existing smaller arrows for emphasis.

SECTION II – STRIPMARKING (Cont'd)

General (Cont'd)

9. Unnecessary, unwanted, or no longer needed stripmarking

   A. Use an "X" to delete a climb/descend and maintain arrow, an at or above/below symbol, a cruise symbol, and unwanted altitude information in SPACE 20 and 24.

      i. Any unwanted altitude restriction must be X-ed out and not lined through whether pre-planned in red or written in black

   B. Draw a horizontal line through other items in all spaces.

10. Assigned altitude must be written in black when issued to the pilot, it will never be red circled in black. If an aircraft reported at an altitude other than the assigned altitude, the reported altitude would be written in black and circled in black.

11. Remarks Section: The **only** stripmarking allowed in the remarks section is those listed in the 50148001 Phraseology & Stripmarking Guide, Lesson Plans, and the 7110.65.

12. With multiple arrivals into KGWO, you must record in space 26 of the arrival strip the coordinated airspace block from sector 67 on **each** arrival strip.

Reserved Numbers

13-15

Preplanning

16. All preplanned information must be written in Red.

   A. Once it is issued to a pilot

      i. Departure instructions may be circled in BLACK (space 15)
      ii. Altitude restrictions below the restriction bar may be circled in BLACK (space 20)
      iii. A reroute may be circled in BLACK (space 25)

SECTION II – STRIPMARKING (Cont'd)

Preplanning (Cont'd)

17. Preplanning (may be circled in RED when coordinated or circled in BLACK after issued to pilot). See examples in the Phraseology and Stripmarking Guide.

    A. Departure instructions (space 15).
    B. Routing (space 25).
    C. Altitude restrictions (space 20).
    D. Preplanned altitude - never circled in black (space 20).
    E. Coordination of type approach - never circled in black (space 28).
    F. Coordination fix for KMLU Arrivals in black (space 19) center estimate (space 15)
    G. Direction arrows are required for the first 9 scenarios and optional for the remaining scenarios (space 23).

        i. If direction arrows are used they must correspond to the route within the fix posting area.

    H. Reduced longitudinal separation (space 26).

NOTE: Preplanning restrictions on enroute/arrival strips that reference aircraft on the ground is allowed.

18. Preplanning for reminders; are never circled in any color and must be rewritten in BLACK if issued. The red preplan may be lined through after action or left on strip student's choice. A BLACK or RED period used for "established on" is an exception to this rule and may be circled when issued or coordinated.

    A. -T (spaces 12 – 14) VIA depart
    B. -SYD (spaces 12 - 14) visual separation approved between
    C. -RLS (spaces 12 - 14) release instructions to tower.
    D. -CTL (space 14) get control of aircraft
    E. -RP (space 26) report passing
    F. -V< (space 15 or spaces 12 - 14) void time
    G. -H (space 28) Holding
    H. -67 (space 26) Block airspace with sector 67
    I. -. or. (space 20) established on
    J. -___"Underline the equipment suffix, IAFDOF, or FRC"
    K. - Miles per minute (usually only remotes)

SECTION II – STRIPMARKING (Cont'd)

Preplanning (Cont'd)

NOTE: Students may choose to preplan additional information in RED next to RP however the entire stripmarking action must be recorded in black when issued.

19. Stripmarking **Not** Allowed for Preplanning:

    A. Holding instructions
    B. Transfer of Control Points (TCPs)
    C. Communication change instructions (mileage and frequency)

SECTION III – PROCEDURES

General

1. Do **not** reroute the aircraft unless it is necessary.

2. Pass all restrictions that are inside the Transfer of Control Point (TCP) to approach control.

    A. If possible, preplan these restrictions and forward them when you pass the inbound or APREQ.

3. Issue restrictions to arrivals, departures, and over flights that provide separation from each other, restricted airspace, protected airspace, MEAs, and other facility's airspace.

4. Separate aircraft using minimum altitude and mileage restrictions.

    A. Combining restrictions within 5 flying miles of each other is acceptable

5. Use assumed departure times to calculate estimates forwarded to the next sector/facility.

    A. KJAN, KVKS, KGWO, AND 0M8 - Split space 18 of the departure strip, in "red" write your assumed departure time on the left side of the split. If there is more than one strip to the flight; in "black" write your assumed departure time in space 12 of the second strip.

SECTION II – STRIPMARKING (Cont'd)

General (Cont'd)

B. KMLU – Write your assumed departure time in "red" using space 13 of departure strip. Then add your assumed time to the plus time and enter that time in black using space 15 of the departure strip. If there is more than one strip to the flight; in "black" write this calculated time in space 12 of the second strip.

C. If actual departure times differ by more than 3 minutes of the assumed departure time you will need to recalculate times used in subsequent strips and coordination.

6. IAFDOF – All aircraft must be assigned an altitude appropriate for direction of flight prior to leaving sector 66.

7. Carry forward all stripmarking and revisions.

   A. Ensure that all coordination is completed

8. Use the word "CORRECTION."

   A. When amending the route of flight or altitude in the previously issued clearance, you must restate all applicable altitude restrictions
   B. If you use the word "CORRECTION" while issuing a clearance, you only have to restate the portion of the clearance you are correcting.

9. Coordinated information shall be circled in red as per the Aero Center Phraseology and Stripmarking Guide.

10. Aircraft Performance – the following shall be used in the nonradar lab to determine aircraft performance during climb or descent:

    A. Single engine prop – 1,000 feet per minute
    B. Multiengine and turboprop – 2,000 feet per minute
    C. Turbojet – 4,000 feet per minute

    NOTE: The purpose of these climb and descent rates are for remotes to calculate requested altitude reports and are not to be used for nonradar separation.

SECTION III – PROCEDURES (Cont'd)

General (Cont'd)

11. Approach/Holding Pattern Airspace: Holding pattern template eight is used in Aero Center to identify the airspace that must be protected for holding pattern(s)/approach procedure airspace.

    A. Holding instructions issued: the holding pattern is referenced by the assigned radial, course, or airway. After issuance, the holding pattern becomes active and shall be protected up to 10 minutes prior to the arrival fix estimate for the aircraft that has been issued holding. Aircraft are considered to be separated when ten minutes or more exists at a holding fix if the first aircraft is an enroute/overflight, and the subsequent aircraft will be cleared to hold. For example: an overflight progressing MHZ at 1542 is separated from a KJAN arrival estimating MHZ at 1552 which has been issued holding. (exception: opposite direction same/adjacent airway)
    B. Holding instructions not issued: Once an aircraft landing at an airport reaches the arrival fix, the holding pattern becomes active and the aircraft will hold on the inbound radial.
    C. Approach airspace to KGWO is different from holding pattern airspace at SQS. When an approach clearance is issued at KGWO, the protected airspace must be increased to include the approach airspace on V11 northeast of SQS and on V278 northeast of SQS.
    D. Holding at SQS extending into sector 67 will always be on the SQS256R and left turns. Therefore, the phraseology is "BLOCK (altitude) AND BELOW FOR HOLDING AND APPROACH(ES) AT SIDON."
    E. A KGWO arrival that holds will be held at:

        i. 70 if the aircraft was at or above 70.
        ii. their enroute altitude if the aircraft was at or below 60.

        NOTE: multiple arrivals will possibly step these altitudes down.

    F. The blocked airspace with sector 67 will only be for the required altitudes needed. (i.e. aircraft holding at 50 while blocking 70 and below with sector 67 is an error).

12. Deadwood – when a/c progresses a fix, pull the previous strip; when the estimate (plus 3 minutes) for the next fix outside D66 has passed or a report clear of sector 66 airspace is received, pull the last strip in the sector. This next fix estimate must be recorded in space 22 of the strip.

SECTION III – PROCEDURES (Cont'd)

General (Cont'd)

13. Remote stripmarking should be the same as the controller's when clearances are recorded. Deadwood procedures for the remote are the same as the controller's.

14. Restriction bars must have restrictions below them and may not be put on the strip before the problem begins just because the aircraft is an arrival/departure and may need a restriction.

15. There is no longitudinal protected airspace for Special Use Airspace (no 10 minute "push")

16. FIVE miles may be used as a crossing restriction if it is thought to be the required restriction for separation. Refrain from saying "never use 5 miles".

17. Directions in ZAE during nonradar are as follows:

    A. North is only 360 radial
    B. Northeast – 001-089 radials
    C. East is only 090 radial
    D. Southeast – 091-179 radials
    E. South is only 180 radial
    F. Southwest – 181-269 radials
    G. West is only 270 radial
    H. Northwest – 271-359 radials

18. For Aero Center Nonradar Lab, aircraft meeting the definition of OPPOSITE COURSES may be separated by using either Lateral or Longitudinal methods.

SECTION III – PROCEDURES (Cont'd)

General (Cont'd)

19. In instances where 10 minutes of separation is going to be lost before the involved aircraft are on sector 66 frequency, the student must either:

    A. Call the transferring controller and get (at least) early communication so that another form of separation may be established before 10 minutes of longitudinal separation is lost. In this instance, the remote will check on immediately after the aircraft progress the final fix outside of sector 66's airspace. (Previous fix on the first strip) The controller must establish a new form of separation before 10 minutes of longitudinal is lost. The controller must also consider any required airspace restrictions.
    B. Issue a clearance to the transferring controller that establishes another form of separation before 10 minutes of separation is lost. This means that the sector 66 controller must include an instruction to the transferring controller to issue the clearance by a specific time that insures the clearance is effective before the loss of 10 minutes of longitudinal separation. For example: "Clearance for N25E. N25E cross 6 miles northwest of Sidon Vortac at or below eight thousand, cross Sidon Vortac at and maintain seven thousand. Issue before one two one four."

Reserved Numbers

20-22

SECTION III – PROCEDURES (Cont'd)

Arrivals

23. An aircraft conducting an approach is descending at pilot's discretion.

24. Approach clearances must be written in black.

    A. Do not circle in BLACK previously coordinated red approach stripmarking.

25. Runway 23 will always be the active runway at KGWO. All KGWO arrivals must fly the VOR runway 5 approach circle to runway 23.

26. Duration of an instrument approach at non-approach control locations:

    A. KGWO add 7 minutes to the SQS center estimate or the time cleared for approach, whichever is later.
    B. KVKS and 0M8 add 5 minutes to the NDB time or the time cleared approach, whichever is later.

27. If KGWO arrival holds for more than 3 minutes, update KGWO airport estimate with GWO Tower.

28. Arrival information will be forwarded to GWO Tower as follows:

    A. aircraft call sign
    B. aircraft type
    C. KGWO airport estimate
    D. type of approach

29. Arrival information will be forwarded to MLU Approach as follows:

    A. Aircraft call sign
    B. Aircraft type and equipment suffix
    C. DINKY intersection center estimate
    D. Altitude
    E. The Transfer of Control Point (TCP) must be the common lateral boundary
    F. Forward inbound information to approach control facilities before transfer of control jurisdiction.

SECTION III – PROCEDURES (Cont'd)

Arrivals (Cont'd)

30. Arrival information will be forwarded to JAN Approach as follows:

    A. Aircraft call sign
    B. Aircraft type and equipment suffix
    C. Magnolia VORTAC center estimate
    D. Altitude and any restrictions inside of the transfer of control point
    E. Forwarding of destination airport if other than KJAN
    F. The Transfer of Control Point (TCP) must be the common lateral boundary, include the victor airway if mileage and direction define more than one airway.
    G. Forward inbound information to approach control facilities before transfer of control jurisdiction.

31. If there is no traffic, or once traffic is no longer a factor, KVKS arrivals must be cleared for approach prior to the DORTS estimate.

32. If there is traffic, aircraft must be cleared to hold (minimum separation from traffic) prior to the DORTS estimate. The requirement to issue holding at least 5 minutes prior to the holding fix still applies.

33. KGWO arrivals that have been issued holding due to KGWO departing traffic can be issued an approach clearance after progressing SQS if:

    A. The student receives a report from the departing aircraft that clears the protected airspace for the KGWO arrival.
    B. There is no other traffic for the KGWO arrival.

Reserved Numbers

34

Departures

35. All departure clearances off an uncontrolled airport shall include a void time and compliance verification if either initial departure instructions are added or initial routing is changed.

36. For a departure whose initial departure instructions include a heading to join an airway, the first crossing restriction must be "established on" an airway.

SECTION III – PROCEDURES (Cont'd)

Departures (Cont'd)

37. KGWO departures which require a crossing restriction or report on V11, V278 or V535 of 10 miles NE SQS or less must include "ON/established on" an airway.

    Example: "Cross one zero miles NE SQS VORTAC ON/Established ON V11 at or below 6000"….

38. At KGWO, Victor 278 is the **only** airway in which its 4NM protected airspace overlaps Greenwood airport. Students must protect for this with KGWO departures.

39. A departure is considered delayed when the clearance is not issued;

    A. In a timely manner.
    B. By the end of the scenario.
    C. When an EDC expires.

        i. Students shall issue an EDC of 10 minutes from the current clock time.

40. A departure clearance is effective upon termination of the call (student issuing the clearance has given their initials).

    A. Even though a separation error has occurred, students should try to correct their mistakes as soon as they recognize that an error was made.
    B. If corrections are made, all applicable restrictions should be repeated.

41. 0M8 departures will be issued a heading to fly when entering controlled airspace.

42. No KVKS departure clearances direct HATER or DORTS.

43. Clear aircraft that files direct via an airway or radial.

    Examples: From KVKS to MLU or MHZ, use V417. From KVKS to HEZ, use the HEZ026R.

    - Aircraft on V417 are not traffic for KVKS departures filed over NATCHEZ (HEZ).

SECTION III – PROCEDURES (Cont'd)

Departures (Cont'd)

44. KVKS departures that are given initial departure instructions will never accept a southwest departure; they will only be allowed to depart northeast

45. Direction of takeoff/turn shall be solicited for every KVKS departure that is issued initial departure instructions

46. The one- and two-minute departure rules CANNOT be used if the second departure is Faster.

47. For KGWO departures give the first fix if not stated in the route of flight ("Cleared as filed, via Sidon") – this would be necessary for traffic advisories and/or the use of visual separation. Additionally, to issue every aircraft departing KGWO "Depart southwest direct SQS" is an error. This shall be reserved for using a rule, such as the 2 minute rule.

48. Issue requested altitude unless there is a conflict (traffic, MEA violation or MOA airspace), or an operational advantage is gained (0M8/KVKS departure landing within JAN approach airspace). The student is allowed to change the altitude by 2,000 feet without penalty, unless the aircraft becomes speed restricted. If a student moves an aircraft more than 2,000 feet or speed restricts the aircraft an error occurs, as the student should have rerouted the aircraft.

49. Requested altitudes must be forwarded to the next intra-facility sector if the requested altitude cannot be issued to aircraft while in sector 66 airspace and the requested altitude is not known to the next sector.

50. If an aircraft departs KJAN or KGWO and separation is needed at the MHZ or SQS VORTAC for other traffic, an airport departure time does not provide separation because the airports and VORTACs are not co-located. Either a DME report or VORTAC/FIX report must be solicited to ensure separation. If a MHZ or SQS VORTAC time is needed for separation on a departure aircraft, the time must be recorded in space 26 of the flight progress strip using the format MHZ/1210. If a current position report is solicited, the time must be recorded in space 26 of the flight progress strip using the format 15NW/1213 or 15NWSQS/1225 as appropriate.

SECTION III – PROCEDURES (Cont'd)

Departures (Cont'd)

51. Two successive KVKS departures can be separated by:

A. The one-minute rule

i. First aircraft reports departure time
ii. Student does not have to use this rule

B. An altitude report

C. A report clear of the protected airport airspace

i. 54 DME SE MLU
ii. 37 DME SW MHZ
iii. 37 DME NE HEZ

D. 10 minutes

NOTE: Students should not delay aircraft.

52. A KVKS departure westbound over MLU can be separated from a KVKS arrival from over MHZ by a report of 45 DME SE MLU VORTAC.

53. KVKS departure over MHZ can be separated from a KVKS arrival holding by a report of 37 DME SW MHZ VORTAC.

54. A KVKS departure cleared HEZ026R HEZ is not traffic for aircraft on V417.

55. All KVKS/0MB departures must be given (after verifying phraseology). Advise (ACID) Released for Departure. Contact AERO Center One Two Five Point Zero.

Frequency change

56. Military aircraft must be given both UHF and VHF frequencies on communications transfer.

57. Communications Change to other En Route sectors:

SECTION III – PROCEDURES (Cont'd)

Frequency change (Cont'd)

A. DME aircraft – communications shall be transferred at the diamond boundary mileages.

B. Non-DME aircraft- communications shall be transferred at the time the aircraft will be over the diamond mileage point. Use the aircraft's speed and distance to travel to determine the time.

   i. Students may use STUEE for aircraft on V18 entering MLU LO.

C. If it becomes necessary to keep an aircraft on your frequency for a report that does not comply with a. or b. above, coordination must be accomplished with the affected sector before the event.

   i. When RP 14NE SQS is needed for a KGWO dept. to clear a KGWO arrival for approach, coordinate late comm. change with D12. No additional stripmarking is required.

58. Communications Change for aircraft that land in sector 66;

A. KVKS arrivals that have been cleared for approach: "Report cancellation of IFR this frequency or with Aero Center Flight Data, Change to advisory frequency approved" issued when aircraft reports DORTS.
B. KVKS arrivals that are in hold at the VKS NDB: "Report cancellation of IFR this frequency or with Aero Center Flight Data, Change to advisory frequency approved" issued when the aircraft is cleared for approach.
C. KGWO arrivals that have been cleared for approach: "Contact Greenwood Tower one two zero point two" issued after the aircraft reports passing Sidon VORTAC.
D. KGWO arrivals that are in hold at Sidon VORTAC: "Contact Greenwood Tower one two zero point two" issued after the aircraft is cleared for approach.

Frequency change (Cont'd)

59. Communications Change at JAN APCH;

A. DME aircraft – shall be transferred at the TCP (boundary mileages)
B. Non-DME aircraft - shall be transferred at the coordinated TCP (time, fix, altitude)
C. When the TCP to APCH Control is time, mileage, or altitude, include the route (if clarity is needed)

60. Communications Change at MLU APCH;

A. DME aircraft – shall be transferred 49 NE MLU and shall be issued after aircraft progresses MHZ.
B. Non-DME aircraft - shall be cleared via V18 and shall be transferred 5 minutes before the DINKY estimate.

Reserved Numbers

61-64

Separation Outside Sector 66

65. The student is responsible for separation outside sector 66 if the restriction needed for separation occurs in sector 66 airspace.

A. This loss of separation will happen east of Monroe VORTAC with traffic on V18 and on V417 or V427.
B. In order to prove separation exists; the student will need to calculate Monroe VORTAC center estimate(s).

i. Center estimates are recorded in space 22A below the next fix.

EXAMPLE: MLU is the fix

1525 is the pilot estimate
1524 is the center estimate

MLU
1525
C1524

C. During Non-Radar scenarios the row instructors should unable situations where the needed restriction occurs outside sector 66 airspace.

EXAMPLE 1: N12569 160 KSTL..SQS.V9.MCB..MMUN

N85423 160 KJAN.V555.MCB..KMSY

Separation Outside Sector 66 (Cont'd)

If these two aircraft are not separated at MCB VORTAC the instructor should override the remote during the "APREQ call".

'UNABLE. CLIMBING TO ONE FOUR THOUSAND APPROVED.'

(or something similar)

EXAMPLE 2: N45119 140 KSTL..SQS.V9.MCB..KMUN

N56543 160 KJAN.V555.MCB..KMSY

If these two aircraft are not separated at MCB VORTAC the instructor should work with the remote to unable the "APREQ call".

'CLIMBING TO ONE SIX THOUSAND APPROVED WITH A RESTRICTION TO CROSS ONE SEVEN MILES NORTHEAST MCCOMB VORTAC AT OR ABOVE ONE FIVE THOUSAND.'

(or something similar)

D. Do not add confusing/complicated restrictions to the student's clearance.

Reserved Numbers

66-68

Other

69. Interphone etiquette - Students should not keep their mic keyed to buy time for reviewing a clearance.

SECTION IV – SCENARIO PLANNING

Checklist

1. Sequence strips

   A. By time— (earliest estimated time at the bottom, if two strips have the same estimates sequence by altitude, lower altitude first) under proper bay headers.

2. Check for:

   A. Equipment suffix (TUX non-DME) aircraft

      i. Look at aircraft type (number of aircraft and/or heavy), speed, and equipment suffix.

   B. Aircraft on frequency at the start of the problem

      i. There will be a pilot estimate in space 17; check the aircraft's altitude as level

3. Draw red direction arrows in space 23 (optional after scenario 9 but helpful).

4. Check for:

   A. Inappropriate Altitude for Direction of Flight (IAFDOF)

      i. Underline altitude in red

5. Mark strips with a red W or (Ws) to the right of the altitude to identify conflicts with other aircraft, airspace or MEAs. If more than one conflict exists for the same aircraft, the student may mark the strip with additional red Ws next to the first one. Resolutions should be preplanned.

SECTION IV – SCENARIO PLANNING (Cont'd)

Checklist (Cont'd)

6. Preplan arrivals and departures.

   A. Determine if an approach clearance or a clearance limit (KJAN or KMLU) is needed.

   B. KGWO arrivals have priority over KGWO departures unless the proposal time of the KGWO departure is earlier than the SQS estimate of the arrival. If times are the same, the arrival has priority.

   C. KVKS arrivals have priority over KVKS departures unless the proposal time of the KVKS departure is earlier than the initial approach fix (IAF) estimate of the arrival (which is the VKS estimate in space 22). If times are the same, the arrival has priority.

   D. Look for traffic at or below inbounds altitude

   E. Plan appropriate restrictions to place arrivals underneath traffic.

   F. Plan appropriate restrictions for multiple arrivals to the same airport

      i. Set up holding for second arrival; approach sequence should be determined by time or priority, such as an emergency or Med Evac flight

   G. Preplan departures to requested altitude (if you have time)

      i. Most will require a restriction protecting for HPAs or airway degrees divergence.

         NOTE: Remember to protect for Holding Pattern Airspaces (HPAs) and MEAs.

   H. Check for FRC in the remarks section of the flight plan. The only aircraft to be issued an FRC are those with FRC in remarks.

7. Establish priorities

   A. What are you going to do first, second, etc. when the clock starts?

SECTION V – Guidelines for Instructors

General

1. Be available for preplanning: 15 minutes before scenarios 1-10
   10 minutes before scenarios 11-19
   5 minutes before scenarios 20-27

2. Try not to stop clock after scenario 20.

3. Teaching personal techniques. It is almost impossible for us to teach different lab situations without bringing in some of our own personal techniques. When this is done, we should identify these as our personal techniques and point out that they are not the only solutions to the situations being taught. Ensure that a student does not interpret your personal technique as mandatory. When you have demonstrated a personal technique, write this technique down on the student's worksheet for the student's further consideration and indicate this item as a technique by writing the letter "T" in the block where error designators S and E are normally written. However, this shall **NOT** be done on evaluation days.

4. Noise in the lab. The FAA Academy is a learning environment. This includes classrooms as well as laboratories. We as instructors should respect this and keep noise levels as low as possible before and during all control problems.

5. Instructor remarks to students. Remarks made to students should reflect FAA Academy policy. If you disagree with a policy or a teaching point, bring it up with the FAA course manager, NOT the student. You should also be careful about making comments about the performance of a remote, the student taking the problem, or an evaluation made by another instructor.

6. Performance feedback shall be provided to the student as soon as possible after the training session. This discussion should include an overview of the session, an identification of the student's strengths and weaknesses, and specific

7. Courteous critiques. Be courteous in what you say to students during critiques. If the student ran a poor problem, do not use inappropriate statements. Be honest but not condescending.

APPENDIX A

Airline Designators

ABBREVIATION	TELEPHONY
A	Air Force
AAL	American
AJI	Ameristar
AJT	Amerijet
ASQ	Acey
BTA	Jetlink
CAA	Candler
CHQ	Chautauqua
COM	Comair
DAL	Delta
EJA	Execjet
ENY	Envoy
FDX	Fedex
FLG	Flagship
FLX	Flexjet
G	Guard
JBU	Jet Blue
JIA	Blue Streak
MES	Mesaba
QXE	Horizon
R	Army
RCH	Reach
STG	Stage
SWA	Southwest
UAL	United
USC	Star Check
USX	Air Express
VV	Navy
VM	Marine