Downtown Solo Rules

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1 General Solo Rules

These are a set of rules for playing Downtown solitaire. In these rules, the player controls US forces. The DRV forces are handled by a series of tables and rules.

1.1 Introduction

[TBD. But will include an overview of the solo rules and a general description of the major rule sections.]

1.2 Rules

1.2.1 Precedence

In general, the player plays using the full *Downtown* rules. However, these rules control how DRV units are deployed and behave. The general rule is that where solo and *Downtown* rules overlap or conflict, the solo rules take precedence.

1.2.2 Common Sense

In places the rules deal with the behavior of units in a dynamic and fluid situation. If the solo rules do not clearly describe what to do in a particular situation, players are asked to interpret the spirit of the solo rules as best they can and come up with a 'common sense' solution.

In interpreting events it is always worth remembering that the cardboard pilots, flak gunners and SAM crews in the game do not have the same 'God's Eye' view as the player does and that this can lead them to make some foolish decisions.

1.2.3 Percentile Rolls

Some die rolls in the game are handled via percentile rolls. Roll two ten-sided dice, treating one result as 'tens' and the other as 'units' to generate a result between 01 and 99. If two zeros are rolled, the result is treated as '100'.

2 AAA Units

These rules cover the setup, appearance and behavior of AAA and *Fire Can* units.

2.1 AAA Concentrations

All printed AAA concentrations on the map are active at all times. The following rules describe the creation, placement and behavior of non-printed AAA.

2.1.1 AAA Generation Table

The player rolls one die. The number rolled determines the number and density of AAA concentrations the DRV side has purchased. Cross-reference the number rolled with the number of AAA Points available for the DRV side then consult the AAA Generation Table.

Results are listed as the number of Light (L), Medium (M) and Heavy (H) concentrations purchased.

2.1.2   AAA Generation Table

AAA Points	Die Roll								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9-10**
1	1L	1L	1L	1L	1L	1L	1L	1L	1L
2	1M	1M	2L	2L	2L	2L	2L	2L	2L
3	1M, 1L	1M, 1L	1M, 1L	3L	3L	3L	3L	3L	3L
4	1H	2M	2M	1M, 2L	1M, 2L	1M, 2L	1M, 2L	1M, 2L	4L
5	1H, 1L	2M, 1L	2M, 1L	1M, 3L	1M, 3L	1M, 3L	1M, 3L	1M, 3L	1M, 3L
6	1H, 1M	1H, 2L	3M	3M	2M, 2L	2M, 2L	1M, 4L	1M, 4L	1M, 4L
7	1H, 1M, 1L	1H, 1M, 1L	1H, 3L	3M, 1L	3M, 1L	2M, 3L	2M, 3L	2M, 3L	1M, 5L
8	1H, 2M	1H, 2M	1H, 1M, 2L	1H, 4L	4M	3M, 2L	3M, 2L	3M, 2L	2M, 4L
9	2H, 1L	1H, 2M, 1L	1H, 1M, 3L	1H, 1M, 3L	4M, 1L	4M, 1L	3M, 3L	3M, 3L	2M, 5L
10	2H, 2L	1H, 3M	1H, 2M, 2L	5M	1H, 1M, 4L	1H, 1M, 4L	4M, 2L	4M, 2L	3M, 4L
14	2H, 2M, 2L	1H, 4M, 2L	1H, 3M, 4L	1H, 3M, 4L	6M, 2L	6M, 2L	5M, 4L	5M, 4L	4M, 6L

Pick out the counters for these concentrations and place them to one side.

2.1.3   AAA Placement

All purchased AAA concentrations must be set up on the map. This is done either during the DRV Ground Unit Deployment Phase or during play in the Admin Phase.

Whenever the player needs to set up a concentration, pick one from the pool of counters purchased. In order to keep the density of the AAA concentrations secret until they are picked, flip the counters to their inactive side and then select randomly from the pool.

DESIGN NOTE: If players wish they can ignore the following AAA deployment rules. They are welcome to make 'sensible' placements of AAA that appear to fit the overall defensive scheme. They can put themselves in the mind of the DRV air defense commander and make deployments accordingly. If they are unsure or need an independent arbiter for placement, then use the rules instead.

2.1.4   DRV Ground Unit Deployment Phase

As per the rules, half (round up) of all purchased AAA concentrations must be set up on the map before the start of play. The remainder are 'hidden' units. In the DRV Ground Unit Deployment Phase the non-hidden AAA units are placed.

If there are any US scenario targets that are not in the same hex as a flak concentration, place a non-hidden AAA concentration in their hex. Pick a unit from the pool and place it there. If more than one hex is eligible, start with the target closest to a US entry arrow.

After placing these if there are any AAA concentrations remaining, place one in a hex adjacent to a target. The hex must not already contain a concentration. If more than one such hex is available, start with the target that has the lowest-density AAA barrage zone over it. If more than one such hex is eligible, start with the target closest to a US entry arrow.

Once all AAA concentrations have been placed on map, flip them all to their Active side.

2.1.5   Admin Phase

Hidden AAA Units can be activated and placed on the map during the Admin Phase. To check for Hidden AAA activation, a US unit from an Iron Hand, Strike or Recon mission must be on the map and over a land hex, otherwise don't check.

Roll one die. If the result is less than or equal to the number of hidden AAA concentrations remaining in the pool, one Hidden AAA concentration may be activated. If the result is half, or less than half the number of hidden AAA concentrations, then 2 AAA concentrations may be activated instead.

For each potential concentration check the AAA Deployment Table. Go through the table in order from A to D until the AAA unit is either placed or not.

2.1.6   AAA Deployment Table

A	If any Strike or Recon mission flight is within 5 hexes of the raid target, place a AAA concentration in an eligible hex (see below for definition of eligible hexes) on a direct line between the target and the closest US Strike/Recon mission flight. If there is no such eligible hex (because there are no flights within the distance or all such hexes are occupied by AAA), go to B.
B	If any Iron Hand mission flight is within 5 hexes of the raid target, place a AAA concentration in an eligible hex on a direct line between the target and the closest US Iron Hand mission flight. If there is no such eligible hex, go to C.
C	If any Strike or Recon mission flight is within 10 hexes of the raid target, place a AAA concentration in an eligible hex on a direct line between the target and the closest US Strike/Recon mission flight. If there is no such eligible hex, go to D.
D	Do not place a AAA concentration.

If instructed to place a AAA concentration it must be an eligible hex. Eligible hexes must not contain AAA or the indicated 'closest flight'. They must be on a direct line between the center of the indicated flight's hex and the target hex. (If this line travels along the side of a hex, the hexes either side of the line are eligible.)

The concentration must be placed in the closest hex to either the indicated flight or the target hex. If there is a choice, use the hex closest to the target.

EXAMPLE: The nearest eligible hex to the target is 2 hexes from the target. The nearest eligible hex to the flight is adjacent to it. Place the AAA in the hex closest to the flight.

Once a AAA concentration has been placed on map, flip it to its Active side.

2.1.7   AAA Behavior

AAA concentrations shoot at all US or DRV units they are eligible to attack. If suppressed, roll for suppression removal in every Admin Phase following the suppression.

2.2   Fire Can Units

The number of *Fire Can* units available for the DRV side is listed scenario. In the solitaire game *Fire Can* units will stay Hidden until activated.

2.2.1   Activating Fire Can Units

Fire Can units can be activated and placed on the map during the Admin Phase. To check for *Fire Can* units, a US unit of the Iron Hand, Strike or Recon mission must be on the map and over a land hex, otherwise don't check.

Roll one die. If the result is less than or equal to the number of inactive *Fire Can* units, one *Fire Can* may be activated. For each potential *Fire Can* check the *Fire Can* Deployment

Table. Go through the table in order from A to D until the *Fire Can* unit is either placed or not.

2.3   Fire Can Deployment Table

A	If any Strike or Recon mission flight is within 5 hexes of the raid target, place a *Fire Can* unit in the target hex, if eligible. If there is no such eligible hex, go to B.
B	If any Strike or Recon or Iron Hand mission flight is within 10 hexes of the raid target and is within 2 hexes of a AAA concentration, place a *Fire Can* unit in that AAA concentration hex, if eligible. If there is no such eligible hex, go to C.
C	If any Strike or Recon or Iron Hand mission flight is within 2 hexes of a AAA concentration, place a *Fire Can* unit in that AAA concentration hex, if eligible. If there is no such eligible hex, go to D.
D	Do not place a *Fire Can* unit.

Eligible hexes for Fire Can units are AAA concentration hexes that have not reached the maximum number of Fire Cans they are allowed to deploy.

If there is a choice of eligible hexes, choose the hex closest to the raid target. If there is still a choice of hexes, choose one that is closest to a US Strike, Recon or Iron Hand mission flight.

Once a *Fire Can* unit has been placed on map, set it to its radar 'on' side.

2.3.1   Fire Can Behavior

Fire Can units keep their radars on at all times. They shut their radars down only as a result of ARM Morale rolls. If their radar is shut down, roll to turn the radar back on in every Admin Phase following the shut down.

Fire Can units will fire at the first US flight to move within range in the Movement Phase.

3   DRV SAM Units

These rules cover the setup, appearance and behavior of SAM units.

Note that if a 'MiG day' has been declared (such as in Scenario D3), no SAM is allowed to be activated, though they *are* deployed on the map.

3.1   SAM Set Up

3.1.1   SAM Deployment Tables

During the DRV Planning Phase the player the player marks all the SAM setup locations as listed in the SAM Deployment Table on the DRV planning map. They will find it helpful to mark all the raid targets on the map too.

There are six SAM Deployment Tables. They are ordered by date (Year and Month), so each scenario will match with a different Table. These tables list a series of hex locations on

the mapboard. Select the table appropriate for the scenario and mark the setup hexes for that map.

SAM units are allowed to be placed only in the listed hexes or within a given distance of the specified hex. When setting up SAMs players are welcome to vary the set-up slightly by placing the SAM units within the given radius of the set up hex rather than the hex itself.

DESIGN NOTE: Players can ignore the deployment tables if they wish. If they do this they should try to make 'sensible' placements of SAMs that appear to fit the overall defensive scheme. They should put themselves in the mind of the DRV air defense commander and deploy accordingly. If they are unsure or feel they cannot make a placement decision without biasing it against the DRV, then set up in the deployment table listed hex instead.

All SAM placements on the map must be in allowed hexes as per the *Downtown* rules. All SAM units are placed with their radars off.

3.1.2   SAM Setup Procedure

Pick out counters for the number of SAMs that set up on the map. Also pick out counters for the number of dummy SAMs and dummy radars. In the DRV Ground Deployment Phase place each counter on the map one at a time.

At this stage we do not distinguish between real and dummy SAM units. Simply place a number of located SAM counters equal to the number that would be set up at the beginning of the scenario. For the purposes of this rule, dummy radars set up on the map.

Start by 'defending' each target in the raid by placing a SAM near it. To defend a target a located SAM counter is placed in a hex within 6 hexes of the target. Counter placement must conform to the SAM Deployment Table.

DESIGN NOTE: Common sense applies to setting up the defense. Players may alter or ignore these rules or the SAM Deployment Table if they can see a better defense than the tables provide. Sometimes there may be some occasions where there is no choice but to use a hex listed on the SAM Deployment Table two or more times, offsetting the counter to a nearby hex within the given radius. Always the player should 'play fair' with the DRV set up. Since the raid target is not yet determined this should be easy to do.

Once a target is 'defended' by a SAM, place the next SAM counter. Do this until all SAM counters are used up. Targets in Hanoi or Haiphong must be 'defended' first before any other target. Then targets further away from the two cities must be defended in order of distance.

If all targets are defended and there are still SAM units remaining, start again defending targets with a second SAM.

3.1.3   Hidden SAMs

All SAMs that are not set up before play are hidden. Keep counters for all hidden SAMs off to one side until needed. These will be generated during play.

3.2   Activating Hidden SAMs

3.2.1   SAM Activation Check

In the SAM Acquisition Phase and Admin Phase of each game turn, check to see if any hidden SAM units switch their radars on and are placed on the map. Only check in the SAM Acquisition Phase if there are US flights on the map.

Check the number of hidden SAMs remaining in the game. This number is the Base SAM Activation Number (BSAN). Roll a die and modify this as follows. Use the Acq modifiers in the SAM Acquisition Phase and the Admin modifiers in the Admin Phase:

Acq	Admin	
-1	-1	Date is Jan 1965-Dec 1966
-1	-1	For each pre-emptive ARM fired in the Movement Phase
NA	-5	US raid bombers are not on the map
-2	-2	Nearest US raid bomber flight is more than 12 hexes from the target or downtown Hanoi/Haiphong
-4	-4	Nearest US raid bomber flight is more than 18 hexes from the target or downtown Hanoi/Haiphong
-2	-2	No US flights (of any type) are within 10 hexes of the target or downtown Hanoi/Haiphong

EXAMPLE: In the SAM Acquisition Phase the US Strike mission is 16 hexes from its target and no flights are within 10 hexes of Hanoi or Haiphong. The modifiers total –4. One die is rolled scoring a 3, which is modified to –1.

If after modification the die roll is zero or a negative value, then no SAMs switch on.

In the SAM Acquisition Phase if the modified roll is greater than the BSAN, no SAMs switch on. If the modified roll is a positive number AND equal to or less than the BSAN, one SAM battalion is set up as a SAM Warning counter on the map, with its radar switched on. If the unmodified die roll was lower than the BSAN, two SAM battalions are set up instead of one.

EXAMPLE: It is the SAM Acquisition Phase. There are 4 hidden SAM battalions for a BSAN of 4. On a modified roll of 1-4, one SAM is placed. If the unmodified roll is between 1 and 4, two SAMs are placed.

In the Admin Phase if the unmodified roll is greater than the BSAN, no SAMs switch on. If the modified roll is a positive number, a number of SAM battalions equal to that number are set up as SAM Warning counters on the map, with their radars switched on.

EXAMPLE: It is the Admin Phase. There are 7 hidden SAM battalions for a BSAN of 7. An unmodified roll if 7 is modified to 3. So 3 SAMs are placed. If the unmodified roll was 8 (modified to 4), no SAMs would be placed because the original roll was greater than the BSAN of 7.

To place a SAM unit check the SAM Placement Table below. Go through the table in order from A to E until the SAM unit is either placed or not.

3.2.2   SAM Placement Table

A	Place the counter in any allowed hex within 5 hexes of a detected US flight. If there is a choice, because there is more than one location, place it in the SAM location closest to downtown Hanoi/Haiphong first. If there is no such eligible hex, go to B.
B	Place the counter in any allowed hex within 8 hexes of a detected US flight. If there is a choice, because there is more than one location, place it in the SAM location closest to downtown Hanoi/Haiphong first. If there is no such eligible hex and it is the SAM Acquisition Phase, go to D, otherwise go to C.
C	Place the counter in any allowed hex within 15 hexes of the raid target hex. If there is a choice, because there is more than one location, place it in the SAM location closest to downtown Hanoi/Haiphong first. If there is no such eligible hex, go to D.
D	Do not place a SAM unit.

Measure SAM placement from the closest detected bombing flight to downtown Hanoi or Haiphong. If there is no such flight, measure from the closest US flight of any type to Hanoi or Haiphong. If there are no detected US flights, do not place SAMs.

The first time a hex on the SAM Deployment Table is referenced to place a SAM, put a strike through it on the Planning Map. The second time put a second strike through it to cross it off. After the second SAM is place do not use that hex again for the remainder of the raid.

SAM deployment locations mre than 4 hexes from Downtown Hanoi/Haiphong cannot contain more than one SAM unit and so cannot deploy a second SAM.

3.3   Activating Set-Up SAMs

SAMs that set up located in the scenario keep their radars off until activated. Check for activation in the SAM Acquisition Phase and Admin Phase of each game turn. Also check in the DRV Radar Phase of the pre-raid sequence of play [3.1].

For each located but not yet active SAM, roll a die if a US flight is within 12 hexes (15 hexes if rolling in the Admin Phase). If rolling in the DRV Radar Phase roll for SAMs within 15 hexes of the US raid's entry point.

3.3.1   SAM Activation Table

Roll	Result
1-9	No Activation
10	Possible Activation

Add the following cumulative modifiers:

> +2   US Flight within 8 hexes (entry point within 8 hexes in DRV Radar Phase)
>
> +2   US Flight within 5 hexes (entry point within 5 hexes in DRV Radar Phase)
>
> +2   US Bombing or Recon-tasked flight within 12 hexes (not applicable in DRV Radar Phase)
>
> –1   In SAM Acquisition Phase

Example: In the Admin Phase a US Bombing-Tasked flight at a range of 4 hexes is worth +2 +2 +2 modifiers for a total of +6.

If the result is that there is no activation, there is no further effect. Of the roll is a possible activation, make a SAM Dummy Check. Roll two dice. Add one to the roll for each dummy discovered so far.

3.3.2   SAM Dummy Check Table

Roll	Result
8 or less	The SAM is a possible dummy. It does not activate. Place a spare counter on the SAM unit. If it obtains this result again on its next dummy check it is definitely a dummy and is removed from play.
9	The SAM is a possible dummy radar. Activate the SAM, but on its first attempt to fire at a target make another dummy check. If it does not roll a 10 or more the site is a dummy and must be removed from play.
10 or more	The SAM site activates.

Once a SAM is active, it remains so for the remainder of the scenario, even if it subsequently shuts its radar down.

Once the DRV have generated dummy radars equal to the number they are allowed in the scenario, they may generate no more. All dummy radar results on dummy checks are treated as 'SAM site activates' results.

Once the DRV have generated dummies equal to the number they are allowed in the scenario, they may generate no more. All 'possible dummy' results on dummy checks are treated as 'SAM site activates' results.

3.4   SAM Behaviour

3.4.1   Radar Behavior

SAM units keep their radars on at all times. They shut their radars down only as a result of ARM Morale rolls. If their radar is shut down, roll to turn the radar back on in every Admin Phase following the shut down.

3.4.2   SAM Acquisition

In the SAM Acquisition Phase SAMs with their radars switched on behave according to the SAM Acquisition Table below. Go through the table in order from A to J until the SAM unit takes an action.

3.4.3   SAM Acquisition Table

A	If the SAM site is marked with a SAM Launch counter, it keeps tracking the current flight. Otherwise go to B.
B	If the SAM has acquired a flight that is within 5 hexes of a DRV flight (3 hexes for scenarios set in 1972 or later) the SAM drops acquisition and goes directly to F. Otherwise, go to C.
C	If the SAM has acquired a flight within 5 hexes, it keeps tracking it. Otherwise, go to D.
D	If the SAM has fully acquired a flight within 12 hexes, and is within that flight's front arc, it keeps tracking it. Otherwise go to E.
E	If the SAM has acquired a flight at Low or higher altitude, within 8 hexes, and is not currently in the front arc and 5 hexes of a SEAD tasked flight, it keeps tracking its current target. Otherwise go to F.
F	If the site is within 8 hexes of a bombing-tasked flight at Low altitude or higher and no DRV flights are within 5 hexes (3 hexes for 1972+) and is not currently in the front arc and 5 hexes of a SEAD tasked flight, it tries to acquire the nearest bomber flight. Otherwise go to G.
G	If the site is in the front arc and 8 hexes of a SEAD tasked flight and no DRV flights are within a range of 5 hexes (3 hexes for 1972+), it tries to acquire the SEAD flight. Otherwise go to H.
H	The site tries to acquire the nearest flight within 5 hexes. If there are none, go to I.
I	The site tries to acquire the nearest flight that has the site in its front arc. If there are none, go to J.
J	The site tries to acquire the nearest flight.

3.4.4   SAM Reaction

Each time a flight acquired by an unfired SAM (i.e. a SAM that has not yet attacked this Movement Phase) moves a Movement Point, consult the table below. Go down the list of options from 1 to 7 until an instruction applies. Carry out that instruction.

3.4.5   SAM Reaction Table

Options	Instruction
1	**US Full or Partially acquired flight at a Range of 2-3 hexes.** Fire a Salvo. If there is insufficient ammo, fire one SAM.
2	**US Full or Partially acquired flight at a Range of 4-5 hexes.** Fire a salvo if the target flight is tasked with Bombing, SEAD or Armed Escort, otherwise fire one SAM.
3	**US Fully acquired flight at a range of 6 hexes.** Fire a salvo if the target flight is tasked with Bombing. Fire one SAM if the target is tasked with SEAD or Armed Escort. Otherwise do nothing.
4	**US Partially acquired flight at a range of 6 hexes.** Fire one SAM if the target is tasked with Bombing, SEAD or Armed Escort. Otherwise do nothing.
5	**US Fully acquired flight at a range of 7-8 hexes.** Fire one SAM if the target is tasked with Bombing, SEAD or Armed Escort. Otherwise do nothing.
6	**US Partially acquired flight at a range of 7-8 hexes.** Fire one SAM if the target is tasked with Bombing. Otherwise do nothing.
7	**US Full or Partially acquired flight at a range greater than 8:** do nothing.

4   Solitaire Random Events

During a US flight's movement it may be subject to AAA or SAM fire. If a 'double' is rolled on the dice in any DRV AAA or *Fire Can* attack roll, roll on the Flak Damage Table, SAM attack roll or roll on the SAM Damage Table, a solitaire random event is triggered.

If a solitaire random event occurs, immediately stop play and roll one die on the Solitaire Random Events Table. Apply the result found there.

If the flight expends all its MP without a solitaire random event occurring, roll one die on the Solitaire Random Events Table, ignoring all results except "Event!" results.

4.1.1   Solitaire Random Events Table

Roll	Remarks
1-4	**Inhibit SAM Options 1 and 2.** Attacking SAM units employing options 1 and 2 on the SAM Reaction Table are inhibited.
5-9	**Inhibit SAM Option 2.** Attacking SAM units employing option 2 on the SAM Reaction Table are inhibited.
10	**Event!** Check the Events Options Table. Refer to the topmost paragraph if the moving flight is within two hexes of the raid's target hex. Otherwise refer to the paragraphs below. If neither applies, ignore the result.

If an attacking SAM is inhibited by a Solitaire Random event then its attack does not take place and it doesn't expend any ammo. It does not attack the flight for the remainder of the Movement Phase.

If an inhibited SAM has not yet made a SAM attack in the game so far, convert that unit to a dummy radars if there are any unused dummy radars remaining.

EXAMPLE: A fully acquired CAP flight spends an MP to move 5 hexes away from the acquiring SAM battalion. The SAM attacks according to Option 2, rolling a double 5 on its attack roll. A solitaire random event is called. One die is rolled, for a result of 3 – Inhibit SAM options 1 and 2. The SAM is now inhibited for the remainder of the movement phase. It's the SAM's first shot attempt of the game, but all the Dummy radars have already been deployed so the SAM is not converted.

4.1.2   Event Options Table

If the moving flight is within 2 hexes of the raid's target hex:
If there are hidden *Fire Can* units remaining, place a *Fire Can* counter in the raid target hex with its radar on and resolve a *Fire Can* attack on the moving flight. This is not allowed if the maximum number of permitted Fire Can units are in the target hex or there is no AAA concentration on the hex. Otherwise, the event is lost and no other events can be called.

	If the moving flight is within 12 hexes of Hanoi or Haiphong:
a	If any hex within two hexes of the moving flight meets all conditions to place a *Fire Can* counter and a hidden counter is available, place a *Fire Can* with its radar on counter in the closest such location and resolve a *Fire Can* attack on the moving flight. Otherwise, go to option (b).
b	If the moving flight is detected and any hex within 2 to 5 hexes from the moving flight meets all conditions to place a SAM battalion counter, place a SAM Warning counter in the closest such location and resolve a SAM LOAL attack. (This option is available only from 1967).

As can be seen from these tables, there's no need to roll for solitaire random events at the end of movement unless one of the following applies:

(a) The flight is within 2 hexes of the raid target this Movement Phase.

(b) The flight is within 12 hexes of Hanoi or Haiphong this Movement Phase.

Also, do not bother to respond to 'double' rolls unless (a) and (b) apply OR the flight is currently acquired by a SAM.

5   DRV Air Units

These rules govern the creation and movement of DRV air units.

5.1   Initiative

To decide whether the US or DRV moves first in a Movement Phase use the following rule:

(1) On the first Movement Phase of a raid, the US side goes first.

(2) Starting with the second Movement Phase, the DRV side goes first if it has flights in the Engage zone, otherwise the US moves first.

5.2   Detection

In the Detection Phase roll all US detection attempts before rolling any DRV detection attempts. Note the number of detected and activated DRV air units may affect their GCI level.

5.3   DRV Air Activation Table

The DRV Air Activation Table controls the creation of DRV air units. It consists of a series of rows, each corresponding to a scenario. Each scenario has information listed in a number of columns. Use of the table is described in the following rules.

In future scenarios, the DRV Air Activation Table will be included in the scenario information.

5.4   DRV Flight Generation

DRV flights can be generated during play in two ways: during the pre-raid DRV Air Deployment Phase or during the raid in the Movement Phase or Admin Phase. All DRV generated flights appear as generic counters.

5.4.1   Generic Counter Limits

At no time can there be more generic counters on the map than the number of flights listed in the Flights column for the scenario. (Design Note: generally, the Flight value is twice the number of dummy flights listed for the scenario.) If the rules call for a flight to be generated and the DRV are at their flight limit, then no flight is generated.

The Flight value is permanently reduced by 1 for each Visually Identified DRV flight that has appeared in the scenario. However, it cannot be reduced below 1.

Should the number of generic counters be over the Flights limit at any time, remove counters until the DRV are back within the limits. Start with counters that are furthest away from a US strike or recon-tasked flight. (If there are no strike or recon flights on the map, remove the generic counter furthest from the strike mission's entry hex.)

5.4.2   DRV Air Deployment Phase

During the pre-raid DRV Air Deployment Phase flights can be generated and placed on the map depending the Early Warning Level achieved.

Roll a percentile dice and consult the DRV Air Activation Table, if the dice result is in the range listed for the Dummy# column for the scenario, one flight will set up in this Phase. If the dice roll is greater than the Dummy# column, then two flights can be set up.

If the Early Warning Level achieved is either "Average" or "Good" warning level, then increase the number of flights set up by 1.

5.4.3   Air Deployment Phase Flight Placement

Generated flights need to be set up according to the current Early Warning Level.

If the Early Warning Level allows flight placement near orbit points or open airfields, place those eligible DRV flights on the orbit point or airfield hex closest to the entry hex used by the US strike mission. No more than one flight may be placed per hex, so that if a hex is occupied, the next flight sets up at the next-nearest orbit point or airfield. Flights so placed will be set to the Deck altitude and faced as closely as possible toward the entry hex used by the US strike mission.

If the Early Warning Level allows flight placement in the air anywhere on the map, place DRV Flights near the US entry hex for the strike mission. Flights so placed are set at Low altitude band in any hex at a distance of 10 hexes from the US entry hex, no more than 3 hexes from the map edge and faced as closely as possible toward the entry hex used by the US strike mission. The DRV flight must be set up in a non-sea hex. If no such hex is eligible, set the flight up in the nearest non-sea hex, even if it is greater than 10 hexes from the US entry hex.

Flights set-up at airfields are ignored at the start of play. Discard any such flights and not place any units on the map.

5.4.4   Movement Phase

DRV flights may be generated during the Movement Phase. The first time an initiative chit of value 1 or greater is picked for the DRV in a game turn, check whether a flight takes off. (Do not roll for subsequent chit picks.)

Roll percentile dice. If roll is in the range listed for the Dummy# column for the scenario on the DRV Air Activation Table, then no flight is scheduled to take off this game turn and no flights will be generated. If the dice roll is greater than the Dummy# column then one flight is generated and takes off.

When a flight is generated a generic flight counter is placed at an open airfield under a Ready marker. The airfield used is the closest open airfield to either the US strike mission or (if the mission has not yet entered) the strike mission's entry hex.

5.4.5   Admin Phase

Flights may be generated in the Admin Phase. Roll percentile dice. If roll is in the range listed for the Dummy# column listed for the scenario in the DRV Air Activation Table, then no flight is generated. If dice roll is greater than the Dummy# column then one generic flight counter is generated.

Flights generated during the Admin Phase are positioned in the air in same hex and altitude band as an existing undetected DRV generic flight. No more than one flight may be placed per existing generic flight. If a flight cannot be placed, because there are no generic flights or the number of eligible flights has been used up, no flight is generated.

Flights so generated use generic flight counters and are stacked in same hex as their 'parent' unit at the same altitude and facing.

If there is a choice of locations to generate flights, use the hex closest to a US Flight.

5.5   Flying Profiles

When in flight, generic flight counters may gain flying profiles. This defines the likely aircraft in the unit and the speed values and tactics it may employ. If a generic flight acquires a flying profile, write up the specific aircraft type in the Logsheet. Not all flights have flying profiles; those with profiles behave slightly different from those without.

If a flight using a flying profile is activated, it activates as the aircraft type defined by its flying profile. If a Flight gains a flying profile, it cannot change to a different flying profile. A flying profile must be applied and cannot be rejected.

5.5.1   Gaining Flying Profiles

Flying profiles can be gained during a flight's generation, or during the Movement Phase. A generic flight that is generated according to rule 4.13 from a flight already flying a profile takes that flying profile. Flights taking off from an airbase where only one type of aircraft is allowed to be take that aircraft's flying profile.

Flights that are generated in the air during the DRV Air Deployment Phase [27.63] roll percentile dice to see if they gain a flying profile. Roll percentile dice. If the roll is in the range listed for the Dummy# column on the DRV Air Activation Table, then no flight gains a flying profile. If the dice roll is greater than the Dummy# then one flight gains a profile. Consult the scenario's profile column on the DRV Air Activation Table. Match the dice roll to one of the rows there and reference the aircraft type column to the right. That is the aircraft profile that is assigned to a flight.

5.5.2   Playing the Flying Profile

A flying profile qualifies a flight to use the performance values of specific aircraft. It also qualifies it to fly its tactics too.

If a Flight has assigned a MiG-19 or MiG-21 flying profile, this qualifies it to use the Slash Attack tactic after August 1967.

To claim the Slash Attack tactic, the flight needs to meet all requirements for a Slash Attack. If a DRV flight with a MiG-19 or MiG-21 flying profile meets all requirements to launch a Slash Attack, that Flight will claim a Slash Attack when it attempts air-to-air combat.

5.6   Flight Activation

Until they are activated, the solo system does not differentiate between dummies and real flights. However, there are situations where the system must define if an undetected generic counter is a dummy or a real flight. These are called activation checks.

Detected and visually ID'd DRV flights do not roll activation checks.

5.6.1   Activation Check Procedure

If an activation check is required, roll percentile dice. If the result is in the range for the Dummy # listed in the scenario, the DRV flight is revealed as a dummy and removed from play. If the result is higher than the Dummy #, the flight is a real flight and is not removed from play.

Note that 'real' flights are not confirmed to contain actual units. A real flight that becomes undetected and is activation-checked again in the same or a later game turn may turn out to be a dummy.

Activation checks are made in the following circumstances:

Proximity to US Flights. When a generic undetected DRV Flight moves adjacent to a US Flight make an activation check. (Exception: If there are two or more altitude bands between the US and the DRV flights, no activation check is made.) If a real flight is generated, an engagement check is made with the DRV flight as the attacker.

Targeted by US Flights. When a US Flight successfully engages an undetected DRV generic flight make an activation check. The DRV flight rolls for engagement only if it is a real flight.

US Detection. Whenever an undetected generic flight is detected by the US make an activation check. If it is revealed as a real flight, it becomes detected.

5.6.2 *Visual Identification*

If a DRV flight is involved in air-to-air combat (including BVR combat) it becomes visually identified. Roll percentile dice and find the result in one of the ranges listed in the x2, x3 and x4 column for the scenario. Reference up to the column header and to the right to the aircraft type. The result determines the number of aircraft (2, 3 or 4) in the flight and the type of aircraft, respectively.

If the flight has a flying profile see if the roll gives a result in the row corresponding to the flight's flying profile aircraft type. If it does, apply that result. If it does not, the result is always 2 aircraft of the flight's flying profile.

If the † symbol is within the rolled range, then no more flights can be activated during play. All generic DRV Flights are removed from the map. No new flights may be generated.

If the £ symbol is within the rolled range, only one more Flight can be visually identified during the scenario.

5.7 DRV Flight

DRV flights move when required to by initiative chit pulls. All rules regarding initiative, movement, formations and DRV Organization are used.

Units in flight behave depending on their maneuver zone (see below).

5.7.1 *GCI Level*

If the number of detected and/or visually identified DRV flights in flight exceeds the GCI level, reduce the detection level as per the GCI Level rule. While the GCI Level is exceeded all activation checks result in units being revealed as dummies.

5.7.2 *Flight Order*

DRV flights move in a specific order. So, a priority list has been created to create a movement order. This Priority List is ordered from step A (the highest in priority) to H (the lowest in priority). Do not shift down a step, until all flights subjected to the step requirements are moved.

A flight is defined as 'threatening' if it has a target in its forward hemisphere and is in the rear hemisphere of that target.

A- Flights in the Engage zone threatening a detected US flight.

B- Flights in the Engage zone vs. a detected Bomber/Iron Hand Flight.

C- Flights in the Engage zone being threatened by a US CAP Flight.

D- Aborting flights.

E- Flights in the Approach zone vs. a detected Bomber/Iron Hand Flight.

F- Flight closest to a US Flight.

G- Flights taking off.

H- Disordered Flights.

5.8 Maneuver Zones

Flights can be in one of three Maneuver Zones: the Transit, Approach or Engage Zone. Depending the zone they are in, they'll fly differently.

5.8.1 *Transit Zone*

A flight greater than 10 hexes from a detected US flight is in transit. A Flight in transit is traveling towards combat, trying to save fuel and avoid detection.

Flights in transit always fly at Deck altitude and combat throttle. Flights in transit will move toward the US strike mission via the shortest route. This route must avoid AAA barrage zones and so it must be adjusted to avoid these areas. A Flight in transit never climbs above the deck except to fly over ridgelines, after which it drops back down to the deck. It is not allowed to turn greater than free turn rates.

5.8.2 *Approach Zone*

DRV flights within 10 hexes of a detected US Flight are considered to be in the approach zone. A flight in transit zone can enter the approach zone during its movement.

Approach flights are considered to be positioning themselves into positions to attack. Approach flights may use dash throttle and may change altitude.

Approach Flights have to select targets at start of their movement (or at the moment they enter the approach zone). The closest detected US flight will be taken as the flight's target for the remainder of the Movement Phase. If more than one US flight is eligible to be targeted, target them on the basis of their task as follows:

1. Bombing

2. SEAD

3. All others

The flight should not target any enemy within five hexes of a SAM with its radar on, or flights marked with a SAM acquisition marker.

Once a flight has selected a target, they will move as necessary to find a good position at the Engage Stage. Approaching flights move directly toward their targets. Once a DRV Flight has a target, it will ascend or descend a number of altitude bands enough to match the target's altitude band, but not climb more than one altitude level per game turn. If it has at least 2 fuel points remaining, it will use dash throttle. Flights must turn using the free turn rates – i.e. they may not spend MPs to turn. Where possible they should use the descent rule to reduce altitude and only expend MP to dive if there is no alternative.

DRV flights are not permitted to move into any hex that would conflict with a SAM; i.e. they cannot move into a hex that would make a SAM ineligible to shoot at a target.

5.8.3   *Engage Zone*

Flights within a range of 3 hexes of an enemy flight are considered to be in the engage zone. Flights can enter the engage zone during movement.

Flights in the engage zone must try to enter air-to-air combat with their target this game turn if possible. They can move freely. If they are able they will try to attack from the rear or rear/beam arcs. Flights that do not have enough movement points available to get an air attack are still considered to be in the approach zone.

Once in combat, flights will select their strongest weapon as their primary weapon. If there is more than one eligible weapon, flights will select missiles first.

5.9   General Movement

In general, DRV Flights will maneuver to attack in air-to-air combat. Aborting and disordered flights will move toward an airfield to land, to the China Buffer Zone to escape, or towards a rally point or airfield to recover. However there is a limit to the freedom of movement. DRV flights should be moved so as to not interfere with SAM and AAA activity (i.e. conflict with SAMs).

5.9.1   *Broken Flights*

Aborting flights will move towards a map edge hex in the China Buffer Zone. If it has any points of fuel remaining it will use Dash throttle.

Disordered flights will move toward the nearest rally point (the orbit point/open airfield which is closest in hexes). They will move by the shortest route possible that does not move them closer towards a US flight. If there is no such route, they will move via the shortest route possible.

Aborting and disordered flights will not change altitude.

5.9.2   *Flight Profiles*

Flights with a flight profile use the movement values for their assigned aircraft type. Flights without a flight profile always fly using the movement values of the MiG-17.

5.9.3   *Weather*

In poor weather conditions DRV flights will avoid flying on the deck. They will use Low altitude band as their lowest altitude band. If they find themselves on the deck they will climb out of it as fast as possible. DRV flights that are taking off, or landing are not subject to this rule.

5.9.4   *AAA*

If the maneuver zone instructions would force a flight to climb up from Deck level into AAA barrage, avoid climbing until the flight has exited the barrage.

DRV Air Activation Table

Scenario	Flight	Dummy #	Profile	2x	3x	4x	Aircft Type
D1	4	01-54	55-100	01-20	21-50	51-100	MiG17F
D2	4	01-69£	70-100	01-20	–	21-100†	MiG17F
D3	4	01-41	42-81	01-14	15-34	35-68	MiG17F
			82-100	69-84	85-94	95-100	MiG21F-13
D4	6	01-57	58-74	01-08	09-20	21-40	MiG17F
			75-80	41-60	61-72	73-80	MiG21PF
			81-100	81-90	91-96	97-100	MiG21F-13
D5	6	01-59	60-76	01-08	09-20	21-40	MiG17F
			77-92	41-60	61-72	73-80	MiG21PF
			93-100	81-90	91-96	97-100	MiG21F-13
D6	4	01-48	49-78	01-38£	–	39-48†	MiG17F
			79-100	49-100†	–	–	MiG21PF
D7	6	01-34	35-67	01-10	11-25	25-50	MiG17F
			68-100	51-75	76-90	91-100	MiG21PF
D8	6	01-58	59-79	01-10	11-25	25-50	MiG17F
			80-100	51-75	76-90	91-100	MiG21PF
D9	6	01-58	59-75	01-08	09-20	21-40	MiG17F
			76-83	41-50	51-56	57-60	MiG21F-13
			84-100	61-80	81-92	93-100	MiG21PF
D10	6	01-57	58-69	01-06	07-14	15-29	MiG17F
D11			70-75	30-32	33-36	37-43	MiG19S
			76-88	44-60	61-66	67-71	MiG21PFM
			89-100	72-86	87-94	95-100	MiG21MF
D12	2	01-53	54-72	01-08£	–	09-40†	MiG17F
			73-81	41-44†	45-60†	–	MiG19S
			82-100	61-100†	–	–	MiG21PFM
D13	8	01-63	64-73	01-06	07-14	15-29	MiG17F
			74-79	30-32	33-36	37-43	MiG19S
			80-89	44-60	61-66	67-71	MiG21PFM
			90-100	72-86	87-94	95-100	MiG21MF
D14	4	01-35	36-100	*	*	*	MiG21MF
D15	4	01-72	73-100	01-50	51-80	81-100	MiG21MF
D16	4	01-35	36-100	*	*	*	MiG21MF

† No more Flights can activated in this scenario

£ Only one more flight may be visually identified in this scenario

* The flight generated is always a MiG-21MF flight with one aircraft.

SAM Tables

Place a SAM counter within 1 hex

1965	1221, 1625, 1732, 2022, 2314, 2428, 2727, 2811
Jan-Jun 1966	1139, 1221, 1228, 1625, 1832, 2022, 2110, 0427, 2314, 2320, 2428, 2727, 2811, 3119, 3623
Jul-Dec 1966	1139, 1221, 1228, 1625, 1832, 2022, 2110, 2314, 2320, 0427, 1729, 2309, 2428, 2727, 2732, 2811, 3119, 3325, 3519, 3623

Place a SAM counter within 2 hexes

1967	1139, 1221, 1228, 1625, 1832, 2022, 2110, 2314, 2320, 0427, 1115, 1331, 1729, 2309, 2428, 2727, 2732, 2811, 3119, 3325, 3519, 3623, 0346, 3014
1968	1139, 1221, 1228, 1625, 1832, 2022, 2110, 2314, 2320, 0427, 1115, 1331, 2134, 2423, 1729, 2309, 2428, 2727, 2732, 2811, 3119, 3325, 3519, 3623, 0346, 1316, 2615, 3014

Place a SAM counter within 3 hexes

1972	1122, 1034, 1040, 1315, 1518, 1424, 1627, 1729, 1734, 1831, 2125, 2512, 2610, 2913, 0346, 2232, 2228, 2431, 2435, 2527, 2932, 3431, 3625, 2210, 2413, 2409, 2712, 3014, 1835, 2529