

Being Prepared for the Return Flight in North and South Rotations

LAYOVER AND RETURN FLIGHT RECOMMENDATIONS

The recommendations are made for both the layover and return flight in north/south rotations in order to help:

- Limit sleep loss during layover based on arrival timing; and,
- Increase awareness of alertness-decrement periods and periods favorable to sleep during the return flight based on timing and crew composition.

Elements of the recommendations for layover include:

- Appropriate sleep and nap management;
- Exposure to sunlight;
- Physical exercise; and,
- Meal and food management.

Elements of the recommendations for the return flight include:

- The most likely alertness-decrement periods for basic crews; and,
- Recommendations from which pilots must choose the optimal solution according to their sleep and nap management during layover, particularly on the last day when operating as part of an augmented crew.

LAYOVER RECOMMENDATIONS — BASIC CREW

Time of leaving hotel (LT)	code	Time of arrival to the hotel (HB)		
		1200 to 2259	2300 to 0359	0400 to 1159
0400 to 0859	NSL1	<ul style="list-style-type: none"> - On arrival: Avoid napping, expose yourself to daylight if possible, have a light meal. Avoid coffee or tea late in the afternoon and go to bed at your normal base time. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - Do not take a nap in the afternoon. - In the evening: Have a light meal and go to bed as early as possible. - If longer layover: Follow the same recommendations the following days. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea. Go to bed as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - Do not take a nap in the afternoon. - In the evening: Have a light meal and go to bed as early as possible. - If longer layover: Follow the same recommendations the following days. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea, take a nap as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - Do not take a nap in the afternoon. - In the evening: Have a light meal and go to bed as early as possible. - If longer layover: Follow the same recommendations the following days.
0900 to 1559	NSL2	<ul style="list-style-type: none"> - On arrival: Avoid napping, expose yourself to daylight if possible, have a light meal. Avoid coffee or tea late in the afternoon and go to bed at your normal base time. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: Avoid getting up early. If possible, take a nap before leaving. Appropriate time to take moderate coffee or tea if needed. If not, take advantage of waiting times during hotel-airport transfers to relax or take a nap, even a very short one. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea. Go to bed as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: Avoid getting up early. If possible, take a nap before leaving. Appropriate time to take moderate coffee or tea if needed. If not, take advantage of waiting times during hotel-airport transfers to relax or take a nap, even a very short one. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea, take a nap as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: Avoid getting up early. If possible, take a nap before leaving. Appropriate time to take moderate coffee or tea if needed. If not, take advantage of waiting times during hotel-airport transfers to relax or take a nap, even a very short one.
1600 to 0359	NSL3	<ul style="list-style-type: none"> - On arrival: Avoid napping, expose yourself to daylight if possible, have a light meal. Avoid coffee or tea late in the afternoon and go to bed at your normal base time. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: Avoid getting up early. Take a long nap before leaving. Appropriate time to take moderate coffee or tea if needed. Take advantage of waiting times during hotel-airport transfers to relax or take a nap, even a very short one. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea. Go to bed as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: Avoid getting up early. Take a long nap before leaving. Appropriate time to take moderate coffee or tea if needed. Take advantage of waiting times during hotel-airport transfers to relax or take a nap, even a very short one. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea, take a nap as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: Avoid getting up early. Take a long nap before leaving. Appropriate time to take moderate coffee or tea if needed. Take advantage of waiting times during hotel-airport transfers to relax or take a nap, even a very short one.

LAYOVER RECOMMENDATIONS — AUGMENTED CREW

Time of leaving hotel (LT)	code	Time of arrival to the hotel (HB)		
		1200 to 2259	2300 to 0359	0400 to 1159
0400 to 0859	NSL4	<ul style="list-style-type: none"> - On arrival: Avoid napping, expose yourself to daylight if possible, have a light meal. Avoid coffee or tea late in the afternoon and go to bed at your normal base time. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - Do not take a nap during the day. - In the evening: Have a light meal and go to bed as early as possible. - If longer layover: Follow the same recommendations the following days. - Before flight: In the morning, if your rest during the flight is planned in the first part of the flight, limit your coffee and tea intake. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea. Go to bed as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - Do not take a nap during the day. - In the evening: Have a light meal and go to bed as early as possible. - If longer layover: Follow the same recommendations the following days. - Before flight: In the morning, if your rest during the flight is planned in the first part of the flight, limit your coffee and tea intake. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea, take a nap as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - Do not take a nap during the day. - In the evening: Have a light meal and go to bed as early as possible. - If longer layover: Follow the same recommendations the following days. - Before flight: In the morning, if your rest during the flight is planned in the first part of the flight, limit your coffee and tea intake.
0900 to 1559	NSL5	<ul style="list-style-type: none"> - On arrival: Avoid napping, expose yourself to daylight if possible, take a light meal. Avoid coffee or tea late in the afternoon and go to bed at your normal base time. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: <ul style="list-style-type: none"> - Rest during the first part of the flight (1). In the evening: Have a light meal and go to bed as early as possible. The following day: normal activity, avoid coffee and tea after 12 hours. Do not take a nap. - Rest during the other parts of the flight (2). In the evening: Have a light meal and go to bed at your normal time, avoid coffee and tea after 16 hours. Avoid getting up early. If possible, take a nap before leaving. Appropriate time to take moderate coffee or tea if needed. - Absence of crew coordination: Follow recommendation (2) above. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea. Go to bed as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: <ul style="list-style-type: none"> - Rest during the first part of the flight (1). In the evening: Have a light meal and go to bed as early as possible. The following day: normal activity, avoid coffee and tea after 12 hours. Do not take a nap. - Rest during the other parts of the flight (2). In the evening: Have a light meal and go to bed at your normal time, avoid coffee and tea after 16 hours. Avoid getting up early. If possible, take a nap before leaving. Appropriate time to take moderate coffee or tea if needed. - Absence of crew coordination: Follow recommendation (2) above. 	<ul style="list-style-type: none"> - On arrival: Have a light meal, avoid coffee and tea, take a nap as soon as possible. - During the day: normal activities, exposure to daylight in the afternoon, avoid coffee and tea after 16 hours. - In the evening: Have a light meal and go to bed at your normal time. - If longer layover: Follow the same recommendations the following days. - Before flight: <ul style="list-style-type: none"> - Rest during the first part of the flight (1). In the evening: Have a light meal and go to bed as early as possible. The following day: normal activity, avoid coffee and tea after 12 hours. Do not take a nap. - Rest during the other parts of the flight (2). In the evening: Have a light meal and go to bed at your normal time, avoid coffee and tea after 16 hours. Avoid getting up early. If possible, take a nap before leaving. Appropriate time to take moderate coffee or tea if needed. - Absence of crew coordination: Follow recommendation (2) above.

RETURN FLIGHT RECOMMENDATIONS

	Time of leaving the hotel (LT)	code	During the return flight
Basic Crew	0400 to 0859	BC1	If early wake up, alertness decrement may occur between 13 hours and 16 hours. Alternate active and passive phases. Avoid taking your meals or snacks at the same time as the other crewmember.
	0900 to 1559	BC2	The end of the flight may be difficult because it corresponds to a period favoring sleep. Alternate active and passive phases. Avoid taking your meals or snacks at the same time as the other crewmember.
	1600 to 0359	BC3	Alertness decrements may occur more frequently after midnight if no nap is taken before departure. Alternate active and passive phases. Avoid taking your meals or snacks at the same time as the other crewmember.
Augmented Crew	0400 to 0859	AC1	If early wake up, alertness decrement may occur between 13 hours and 16 hours. Alternate active and passive phases. Avoid taking your meals or snacks at the same time as the other crewmember. <i>Rest starts between 9 hours and 12 hours.</i> This part of the flight is unfavorable for sleep. You should plan a longer rest period or divide your rest into two or three periods spread out over the flight.
	0900 to 1559	AC2	The end of the flight may be difficult because it corresponds to a period favoring sleep. Alternate active and passive phases. Avoid taking your meals or snacks at the same time as the other crewmember. <i>Rest starts between 16 hours and 21 hours.</i> This part of the flight is unfavorable for sleep. You should plan a longer rest period or divide your rest into two or three periods spread out over the flight.
	1600 to 0359	AC3	Alertness decrements may occur more frequently after midnight if no nap is taken before departure. Alternate active and passive phases. Avoid taking your meals or snacks at the same time as the other crewmember <i>Rest starts between 18 hours and 21 hours.</i> This part of the flight is unfavorable for sleep. You should plan a longer rest period or divide your rest into two or three periods spread out over the flight.