#### **TABLE OF CONTENTS**

- 1. DISCLAIMER
- 2. INTRODUCTION
- 3. DOCUMENT OVERVIEW
- 4. DETAILS AND EXPLANATION OF CONTENT
- 5. ABBREVIATION

#### 1. DISCLAIMER

© Airbus SAS, 2014. All rights reserved. Confidential and proprietary document. This document and all information contained herein is the sole property of Airbus SAS. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to a third party without the express written consent of Airbus SAS. This document and its content shall not be used for any purpose other than that for which it is supplied.

#### 2. INTRODUCTION

The Recommended Spare Parts List (RSPL) contains the spares recommendations for Line Replaceable Units (LRUs). The recommendation is calculated by using the Airbus Mathematical Model, which is explained in the initial provisioning training manual titled 'The Mathematical Model'.

The terms and abbreviations used in this RSPL are explained on the following pages. The reader is strongly urged to be familiar with the content of this introduction when referring to the PNR list.

The shown recommendation covers one main base only and is focusing on being prepared for unscheduled removals for the first year of operation only

The listing configuration may come from different effectivity sources. ESY is the AIRBUS Effectivity System for production effectivity. IPC stands for Illustrated Parts Catalogue which means that the same data source like for the IPC is used as effectivity source. In general engine parts are not included, if a part may also appear in the engine manufacturer listing it will be flagged accordingly.

THE PRICES CONTAINED IN THIS RECOMMENDATION ARE BASED ON SUPPLIER PRICELISTS. THE PRICES ARE FOR BUDGETARY PURPOSES ONLY AND DO NOT REPRESENT OR IMPLY A FIRM QUOTE FROM AIRBUS OR THE SUPPLIER.

#### 3. DOCUMENT OVERVIEW

This document contains several sheets. Due to customer selection, certain sheets might not appear in this document. To modify the configuration of the document please consult your contact person in the Integrated Provisioning Services department.

The available sheets in this RSPL are underlined in the list below:

Cover

Includes all relevant information to indicate the concerned airline, aircraft type, material category and the date of document production.

Introduction Parameter

ATA Sort 1 of 0

MFR Sort 1 of 0

PNR Rev. Highlights

ATA Rev. Highlights

MFR Rev. Highlights

The customised parameter information is listed in the Parameter sheet.

Provides a complete overview of the content of the document.

<u>Fleet</u> Lists the applicable aircraft information and the selected source for the aircraft configuration.

PNR Sort 1 of 0 Lists the valid

Lists the valid part numbers for the selected aircrafts in a fixed layout, sorted by part

number (PNR). Lists the valid part numbers for the selected aircrafts in a fixed layout, sorted by ATA

(Air Transport Association) chapters.

Lists the valid part numbers for the selected aircrafts in a fixed layout, sorted by

manufacturer code (MFR).

Lists delta part numbers for the selected aircrafts in a fixed layout, sorted by part numbers. It is only applicable for revisions.

Only parts that meet one of the following conditions will be listed: new or deleted from previous issue or the recommended quantity has changed from the previous

issue or the aircraft quantity has changed from the previous issue.

Lists the delta part numbers for the selected aircrafts in a fixed layout, sorted by ATA. It is only applicable for revisions.

Only parts that meet one of the following conditions will be listed: new or deleted from previous issue or the recommended quantity has changed from the previous

issue or the aircraft quantity has changed from the previous issue.

Lists the delta part numbers for the selected aircrafts in a fixed layout, sorted by

manufacturer code. It is only applicable for revisions.

Only parts that meet one of the following conditions will be listed: new or deleted from previous issue or the recommended quantity has changed from the previous

issue or the aircraft quantity has changed from the previous issue.

PNR Listing is a plain excel sheet part number listing, also known as Flat File.

The associated Requests for Change (RFC) are listed in this sheet.

The associated Specification Change Notices (SCN) are listed in this sheet.

The Interchangeability Condition Document (ICD) provides detailed information of

the conditional interchangeability INC 4 and INC 5 between part numbers.

Provides further information about the manufacturer codes (MFR) and their addresses. It is sorted first numerically, then alphabetically according with MFR

codes.

<u>SPL Investment</u> Provides a brief overview of the spares investment breakdown to groups of

manufacturer codes in percentage

# 4. DETAILS AND EXPLANATION OF CONTENT

# PNR List

In the following, the content of the 'PNR List' will be explained in depth. The explanation are corresponding to the sequence of the column within the PNR list.

# Column A CHG

RFC MSCN

<u>ICD</u>

MFR Address

# Revision Indicator

If an RSPL is a revision of a previous issue, then changes in the new RSPL are

highlighted and flagged with the following letters:

for **new** part number added; PNR is new in this version compared to last version

fast version

for **new** part number added; PNR version is new in this version and it is interchangeable with an given INC to another PNR shown

changeable with an given INC to another PNR shown

# CHINA EASTERN AIRLINES 12/19/2018

for **deleted** part number; PNR is deleted in this version compared to last version D with a replacing part number R for **revised** part number regarding to recommended quantity or quantity per aircraft for revised part number regarding PNR attributes without a change of recommended С quantity or quantity per aircraft for **joined** part number; PNR moved from another category of material for **moved** part number; PNR moved to another category of material М

for **deleted** part number; PNR is deleted in this version compared to last version

no change

blank

 $\underline{\text{without}} \text{ a replacing PNR}$ 

Χ

CHINA EASTERN AIRLINES 12/19/2018

Column C ATA	Air Transport Association
	Air Transport Association (ATA) chapter classification of the item.
Column D MFR	Manufacturer Code
	This manufacturer code identifies the manufacturer/supplier, government agency or other organisation controlling the design and part number assignment of the subject part.
Column F ADT	Additional Descriptive Text
Column G TPC	Technical Publication Code
ACMM CMM CMS IM IPC MM OM TDS NONE	TPC references are as follows: Abbreviated Component Maintenance Manual Component Maintenance Manual Component Maintenance Sheet Installation Manual Illustrated Parts Catalogue Maintenance Manual Overhaul Manual Technical Data Sheet No Technical Publication Code
Column I SPC	Spare Class Code
0 1 2 6	Indicates the classification of the spare part as follows: Reference item Expendable Repairable with dedicated CMM Repairable without dedicated CMM
Column J ESS	Essentiality Code
1 2 3	Indicates a part's essentiality for technical aircraft dispatch: NO GO item GO IF item GO item
Column K ATE	Automatic Test Equipment
Column L TCC	Time Cycle Code
H C L	Indicates that the MTBUR is shown in: Hours Cycles Landings

Column B PNR

Part Number

CHINA EASTERN AIRLINES 12/19/2018

# Column M Mean Time Between Unscheduled Removals **MTBUR** The value of an MTBUR defines the period after that an unscheduled removal of a part from an aircraft is expected. The MTBUR is a 6 digit figure in conjunction with two further data elements, the Time Cycle Code (TCC) and the Removal Rate Indicator (RRI). Column N Removal Rate Indicator **RRI** Indicates the exponential factor to the power of ten applied to the Mean Time/Cycles, Time/Hours or Time/Landings Between Unscheduled Removals (i.e., MTBUR x 10^RRI). Column O Scrap Rate Identifies the percentage (to one decimal place) of the units removed from service which are expected to be scrapped. For example, '999' in the RSPL corresponds to Column P Mean Shop Processing Time It indicates the total number of calendar days from receipt of the part at the repair base until dispatch. This includes administration, handling, repair, test and other functions at the repair shop. Column Q **Quantity per Aircraft**

Column R

Column S

2

3

4 5

6

blank

Column U

Column W

Column

Column Z

**EXP** 

The average quantity per aircraft of the units installed across the fleet.

#### **RFS** 0 Not a potential spare 1 Wear 2 Maintenance Damage 3 Loss 4 Vibration 5 Corrosion 6 Deterioration **7** Extreme Temperature 8 Other 9 Not an initial provisioning part

Reason for Selection

# Customer Originated Change (COC) Buyer Furnished Equipment (BFE) BFE & COC Airbus Contracted Supplier part (ACS) COC & ACS BFE & ACS COC & BFE & ACS

**Buyer Furnished Equipment** 

#### Column T **Power Plant Indicator** PPI It indicates if the subject part number is part of the Power Plant.

Seller Furnished Equipment

**Unit of Measure** 

Column V	Supplier Lead Time
2	This code specifies the type of count, measurement, container or form of the subject part and correlates to the unit price.

# The maximum number of calendar days required by the supplier after receipt of a purchase order to make shipment of the quantity ordered.

X	Identification of parts that will be shown in the Expendable Package List
Column X	RIPL Indicator

**Expendable Parts Indicator** 

	Identification of Removal and Installation part (for A380 only).
	_
Υ	Price Type

Unit Price (in US	3D)
blank BFE flags	
2 Budgetary Price	
0 No Price informa	tion

#### **UNP** Column AA Minimum Sales Quantity

#### Column AB Replacing Part Number Subject part number (Column B) is replaced by this part number

Column AC	Interchangeability Code
INC	
1 One-way- interchangeability	The old part number may be used as a replacement only where the old part number was installed. The new part number is an acceptable replacement for either the old or new part number.
2 Two-way-	The old and new part numbers are both acceptable replacements for either the old

interchangeability or new part number.

12/19/2018

#### CHINA EASTERN AIRLINES

3 Non Interchangeable

The part may be one-way or two-way interchangeable as a set. Refer to the Interchangeability Condition Document (ICD).

5 Qualified

Interchangeability

4 Interchangeable as a

One-way interchangeable parts may be conditionally two-way interchangeable. Non-interchangeable parts may be conditionally one-way or two-way interchangeable.

Please refer to the ICD.

6 Part reidentification A new part number has been given to a part that is in no other way different from the original one. The parts are fully interchangeable.

Note 1: The Illustrated Parts Catalogue (IPC) uses the terms 'I/W' (interchangeable with) for INC 2 parts, and 'RPLD BY' (replaced by) and 'RPLS' (replaces) for INC 1 parts. Please refer to the IPC introduction for more information.

Note 2: If the two parts are INC 1, 2 or 6, then the recommended quantity is only calculated for the new part number. If the two parts are INC 3 or 4, then the recommended quantity is calculated for each part number.

Note 3: If the INC is 5 and the two parts are not interchangeable unless the condition is applied, then the recommendation is calculated for each part number. If the two parts are one-way interchangeable according the ICD, then the recommendation is only calculated for the newer part.

Note 4: If two parts are linked by a chain of interchangeable parts, and one or more of the links are conditionally interchangeable (INC 4 or 5), then the entire chain of interchangeable parts will be listed with the term RPN (Replacement Part Number). The most stringent INC code in this chain will be used for the two parts.

Note 5: If the interchangeability is not the same for two parts on the selected aircraft within the fleet, INC 5 will be stated.

# Column AD REC

#### Recommended Quantity

Indicates the recommended quantity to meet the demands for the number of customer's aircraft to which the part applies through application of the AIRBUS mathematical model and use of the customer's provisioning parameters.

Considering the defined parameters, up to three different recommendations are calculated independently.

#### Column AE MMI

blank 0

M C

Ρ

MC

CP

#### Math Model Indicator

no calculation

calculation without MAD, CFR or PLT parameter or no influence of these parameters

indicates that the value of REC QTY was impacted by the MAD parameter

indicates that the value of REC QTY was impacted by the CRF parameter

indicates that the value of REC QTY was impacted by the PLT parameter indicates that the value of REC QTY was impacted by the MAD & CRF parameter

indicates that the value of REC QTY was impacted by the MRB & ON parameter

#### Column AF Total

# The unit price multiplied by the REC QTY

# Column AG

# Achieved Protection Level

The column provides the Protection Level achieved with the recommended quantity shown under REC 1.

#### Column AN CSN

# Catalogue Sequence Number

Code identifier giving the position of a system/item having a determined function within Technical Data in which specific information is located. The first 6 digits of a CSN are defined within the Airbus ATA 100 Breakdown.

# Column AO, AR, AU

# Interchangeable Part Number

Shows the interchangeable part number. Three different PNRs can be given.

# Column AX, AZ, BB

# **Optional Part Number**

This is a fully interchangeable part in form, fit and function with the subject part number. Three different PNRs can be given

# Column BJ, BL

# Alternative Part Number

This identifies a part that fully meets required functional and structural specifications, but differs either in overall dimensions, connections or mounting provisions and requires additional parts, rework or modification to install in a specific location. Two different PNRs can be given.

# Column BN PPR

# Preferred Part Number

This specifies the preferred spare whether or not installed on the purchased equipment.

# Column BP, BQ, BR

# Optional Supplier Code

Indicates the CAGE code(s) of optional supply sources.

# Column BS, BU

**NHA** 

**MG** 10

13

# Next Higher Assembly

The next higher assembly for a subcomponent and ATA chapter are shown. Two different Part numbers can be shown.

# Column BW Material Category

Airbus Proprietary Part (AIB)

CHINA EASTERN AIRLINES

CHINA EASTERN AIRLINES

#### 12/19/2018

20 Equipment - Line Replaceable Unit (LRU) 21 Fiel Loadable Software (FLS)

30 Standard Part (STD) 31

Standard Part - Cockpit Push Button (CPD) Standard Part (STD)

Standard Part (STD) - Airbus Company Standard Equipment - Line Maintenance Breakdown Part (LMP)

#### **Beamer File**

Next to the 'PNR List' the spare parts information are sorted within the so called Beamer files: PNR Sort, ATA Sort, MFR Sort, PNR Rev. Highlights, ATA Rev. Highlights, MFR Rev. Highlights

The beamer files mainly covers the same information as the part number list using another structure and layout. Additionally changes are underlined in the major data columns, namely SPC, PRICE, MST, ESS, MTBUR, LTM, CUR, PRICE and REC QTY.

Following information to be considered for the beamer files only.

**Optional Supplier Code** (OSC)

Indicates the CAGE code(s) of optional supply sources.

**Overlength Part** Number (OVLPNR)

32, 33

34 70

This is the full part number, if more than 15 characters in length.

**Summary Investment** 

**Figures** Those investment figures are presented at the end of the Beamer Files

> **Grand Total** Number of PNR

Number of PNR without price

Number of PNR with recommendation greater than 0

Number of PNR with recommendation greater than 0 and no price

**CONTAINS LMP** 

Contains Line Maintenance Breakdown Parts. Detailed information is

provided in the LMP RSPL.

**CONTAINS LRU** Contains sub components that are LRUs.

#### 5. ABBREVIATION

ESY

ICD

INC

**IPC** 

LMP

LRI

LRU LTM

**MFR** 

MM

MMI

MST

ACMM Abbreviated Component Maintenance Manual

Additional Descriptive Text ADT Alternate Part Number **ALTPNR APTL** Achieved Protection Level

**ATA Chapter** ATA

Automatic Test Equipment ATE BFE **Buyer Furnished Equipment** CMM Component Maintenance Manual CMS Component Maintenance Sheet

**CUR Currency Code** 

Customer Redundancy Factor CRF ESS

**Essentiality Code** 

AIRBUS Effectivity System for production effectivity

Interchangeability Conditions Document

Interchangeability

**INCPNR** Interchangeable Part Number IM

Installation Manual

Illustrated Parts Catalogue for AIRBUS IPC effectivity

Line Maintenance Breakdown Part Line Replaceable Item

Line Replaceable Unit

Lead Time

MAD Minimum Annual Demand Manufacturer Code Maintenance Manual Math Model Indicator Mean Shop Processing Time

Mean Time Between Unscheduled Removal **MTBUR NHAPNR** 

Next Higher Assembly Part Number

Overhaul Manual OM Optional Part Number **OPLPNR** OSC Optional Supply Code Overlength Part Number **OVLPNR PLT Protection Level Tolerance** 

**PNR** Part Number

**PPRPNR** Preferred Part Number PPI Power Plant Indicator PTI Protection Level QPA Quantity Per Aircraft QTY Quantity Recommended

REC Replaced by Part Number **REPBY** Replaces Part Number REPLS Restricted Usage RESTR Reason For Selection **RFS** 

Removal and Installation Parts List Indicator RIP

**RPN** Replacement Part Number RRI Removal Rate Indicator RSPL Recommended Spare Parts List S/CSN S-File Catalogue Sequence Number

Spare Part Classification SPC

SCR Scrap Rate TAT Turn Around Time TCC Time Cycle Code TDS **Technical Data Sheet** TPC **Technical Publication Code** 

Transit Time TT UNP **Unit Price** 

> CHINA EASTERN AIRLINES 12/19/2018