# Proposal for Electronic UCR

# IN THE REVIEW OF THIS DOCUMENT:

• Yellow highlight in text (not in picture) indicates a comment/question to be considered and evaluated before final approval and implementation.

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# **Executive Summary**

Refer to section 9.7.4.3 in ULD Regulations 1<sup>st</sup> Edition (effective 1<sup>st</sup> January 2013), During the transfer of ULD, the transferring party shall provide the receiving party a receipt (in paper or electronic form) for the transferred unit. The transferring party shall be entitled to a confirmation (in paper or electronic form) from the receiving party.

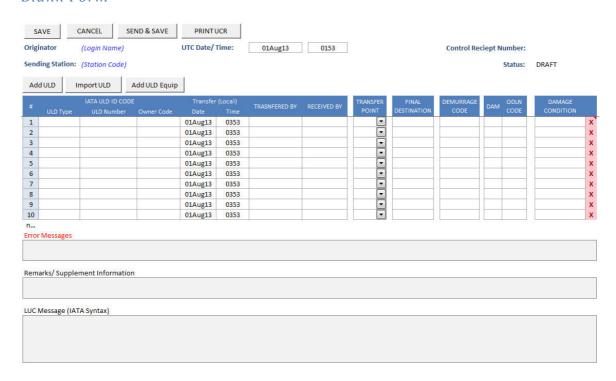
This document is a proposal to develop an electronic form of ULD Control Receipt (E-UCR), which will be used as a confirmation when transferring ULD(s) has occurred. The document will describe requirements for

- Electronic ULD Control Receipt (E-UCR) Form
- Configuration & Setting
- Auto generated LUC from E-UCR
- ULD Exchange Control (LUC) Message Text Description
- Send & Print UCR

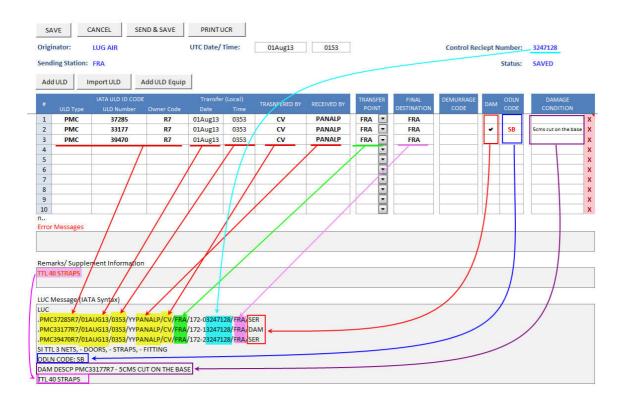
# **Electronic ULD Control Receipt (E-UCR) Form**

### 1. E-UCR FORM SCREEN

# Blank Form

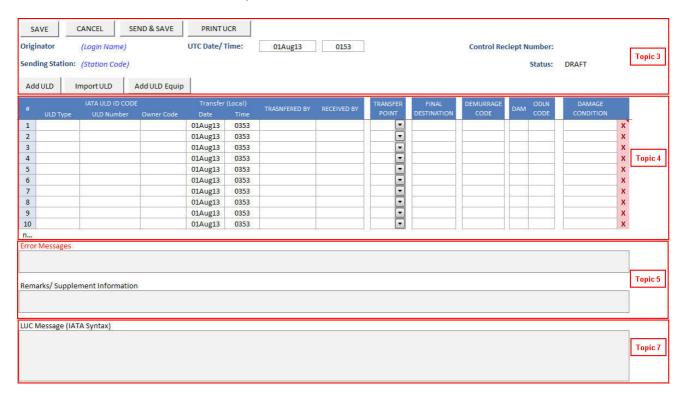


# Sample with data



### 2. Screen Details

The screen is broken into 4 main areas, which are



- Header details & Action buttons
- Message Content
- Error Messages & Remarks/ Supplement Information
- LUC Message (IATA Syntax)

# 3. Header details & Action buttons

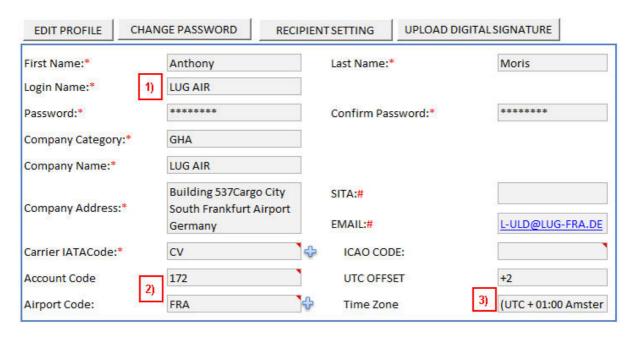
### 3.1 HEADER DETAILS

Displayed information in the header form is as listed below

- 1) Originator
- 2) Sending Station
- 3) UTC Date/Time
- 4) Control Receipt Number
- 5) Status

Information from 1) & 2) is derived from user information, which is configurable based on user; however, the rest from 3) to 5) is generated by system.

New user is required to register or set up an account in order to use system and configure personal data as details below



- 1) Originator: Is derived from "Login Name", which is a unique name and enable to retrieve for other participants if required
  - Question: How will long login name be shown in LUC message? How many spaces? Will the long login name be translated into an abbreviated YY+6 characters (like YYLUGAIR or YYPANALP) for a total of 8 characters like is the current messaging protocol for LUC?
- 2) Sending Station: Is derived from default "Airport Code", where the transferring company or a company acting on its behalf is handled. It's possible to configure more than one airport code for one company, thus sending station will only take from default value.
- 3) UTC Date/ Time: Is auto generated from system date and time +/- configured default UTC Offset
- 4) Control Receipt Number: Is auto generated by system after UCR is generated in which status of UCR's status has been changed from 'draft' to be 'saved'. Control Receipt Number will also be used when LUC message is auto generated, too.
- 5) Status: Is used to indicate stage of UCR, which are
  - Draft is a default status of a new UCR
  - Saved is a status of UCR that user saved
  - Sent is a status of UCR that user saved and sent UCR and/ or LUC to relevant parties

### Header details from sample above



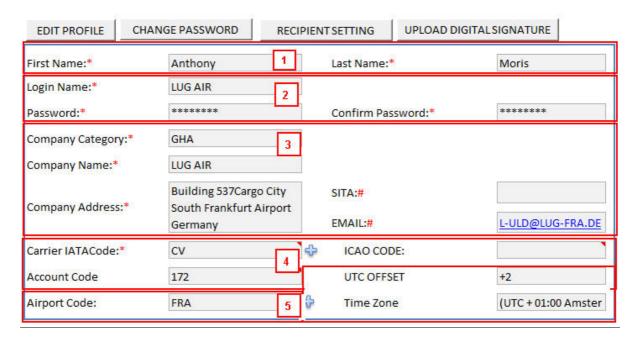
### 3.2 CONCEPT OF USER CONFIGURATION DETAILS

User allow to configure and maintain four parts in user configuration, which are

- 1) User Profile: Ability to create, view and edit
- 2) Change Password: Ability to maintain user's own password
- 3) Recipient (list) Setting: Ability to create, view, and edit list of recipients for user's UCR and/ or LUC
- 4) Upload digital Signature

### 3.2.1 User Profile

System must allow user to create & maintain his/ her profile with details as sample below



- 1) First Name & Last Name:
  - User can key in details of their First & Last Name
- 2) Login Name & Password:
  - Number of character for login name, which will be used uniquely as non-airline code of either transferring or receiving party. User will be able to key in UTF-8 character, and not more than 15 characters
- 3) Company Details:
  - Company Category: User needs to specify what category of its company. For example Airline, Ground Handling Agent (GHA), etc... There should be an additional screen to pre-define the company category
  - Company Name: To define company's name. User will be able to key in UTF-8 character, and not more than 65 characters.
  - Company Address: To define company details, this value will be used as the transferring's address details
  - o SITA and / or email: User can key in details of either SITA or Email or both.
- 4) Carrier Details:
  - Carrier IATA Code: User will need to define its carrier code (if category is airline) or carrier code in which user is working on behalf of (when category is GHA or agent).

- Carrier ICAO Code: This field is optional so that user could identify carrier's ICAO code
- Accounting Code: To add more details of defined carrier's accounting code
   What will be used in lieu of accounting code for non-airlines. How will the 3-digit
   accounting code in the LUC message be identified when UCR is sent by a non-airline?

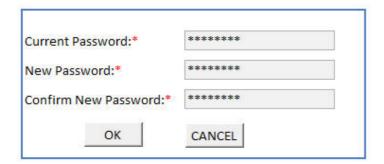
As GHA may work for more than one carrier, who is member of IATA, user can add more details of his carrier by clicking at 'plus button' ( )

5) Number of Airport codes configured for each company with station's UTC offset details.

The concept of user configuration is aimed to be applicable for any current user configuration and/or address book

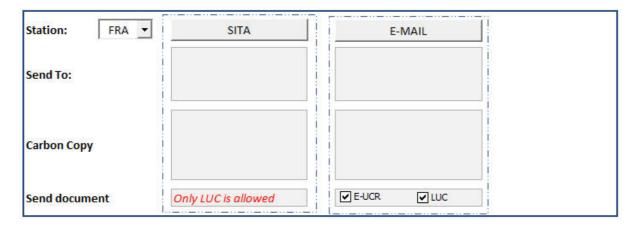
### 3.2.2 Change password

System must allow user to change their password



### 3.3.3 Receipt List

User can define who will be the recipients of their E-UCR / LUC message. If there is more than one station(s) under user profile,



System should also allow other type of interface as well. For example, an XML standard, Web API or MQ Series.

### 3.3.4 Upload digital signature

User can use this button to upload its own digital signature, which will be used to cross check when UCR is signed in either releasing or returning transfers.

### 3.3 ACTION BUTTONS IN UCR FORM

### 1) Save Button

Use to save message in its current stage and process against defined business logic – LUC Message specification (as attached)

- If there is any error, error message will appear in 'Error message' area in section 2.3
- If there is no error, LUC message will be generated automatically, which will be shown in area section 2.4, and control receipt number is automatically generated.

### 2) Cancel Button

Use to cancel message in its current stage, which will roll back all the changes of the UCRs to its previous stage.

### 3) Send & Save Button

Once user is ready to send out UCR or LUC, user will use this button to send the message to its relevant parties, which is configured in 'personal setting' (by station) However, User should be able to see the draft of the email with the ability to add/remove SITA/ Email, and confirm to send out the UCR/ LUC.

### 4) Print UCR Button

Use to print UCR, which allow user to sign digital signature at both 'Transferring Party Signature' and 'Receiving Party Signature'

These signatures need to be defined in the system and attached to the user.

### 5) Add ULD Button

- a. Use to add ULD if user would like to add ULD into the form. There are three different ways to input data into UCR form
  - i. Enter Code: Manually key in ULD Number
  - ii. Scan barcode (Further development)
  - iii. Take picture (Further development)
- b. If user would like to add more than 10 units into one UCR, user can click at 'n...'

### 6) Import ULD Button

User can use this button to import the list of ULDs into UCR form. This function should allow either importing via flat file or pasting from clipboard.

### 7) Add ULD Equip Button

Use to enter quantity of support equipment, which are Nets, Doors, Straps, and Fitting, which have been released or returned with the ULD(s). After click 'Add ULD Equip', dialog below will appear for user to fill up information.

These may need to be configurable as other parties may need to identify other type of support equipment; for example, Wooden planks and XPC, YPCs, Spider nets, etc..



Sample from 'E-UCR' into LUC

LUC Message (IATA Syntax)

LUC

.PMC37285R7/01AUG13/0353/YYPANALP/CV/FRA/172-03247128/FRA/SER

.PMC33177R7/01AUG13/0353/YYPANALP/CV/FRA/172-13247128/FRA/DAM

.PMC39470R7/01AUG13/0353/YYPANALP/CV/FRA/172-23247128/FRA/SER

SITTL 3 NETS, - DOORS, - STRAPS, - FITTING

ODLN CODE: SB

DAM DESCP PMC33177R7 - 5CMS CUT ON THE BASE

TTL 40 STRAPS

# 4. Message Content

This section contains list of columns below

### **4.1 IATA ULD ID CODE**

Insert in total of nine up to thirteen-character identification code, which divide into

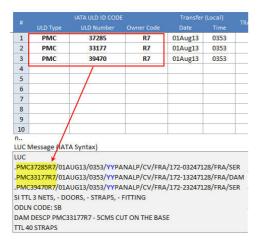
- 1) ULD Type: Insert with character format as "amm"
- 2) ULD Number: Insert character format as "mnnn(n)"
- 3) Owner Code: Insert character format as "mm"
- 1) IATA Regulations stipulate "aaa" but "amm" takes grandfather rights for old units into consideration; it remains to be decided what the final text should be.
- 2) "nnnnn" reflects the known situation until recently where "mnnnn" reflects the implementation of the proposal for 4<sup>th</sup> position

N.B. The format is based on IATA's regulation -

### Syntax Rules

- a represents a single alphabetic character;
- n represents a single numeric character;
- m represents only mixed alpha (characters A through Z) and figures (numerals 0 through 9).

### Sample from 'E-UCR' into LUC



### 4.2 TRANSFER (Local)

Insert the appropriate of

- 1) Date: Insert the appropriate date of transfer. The default date value showing in the form is the local date using two digits to identify "Day", three letters to identify "Month", and two digits to identify "Year". E.g. 24<sup>th</sup> April 2013 to be shown in the form as highlighted in yellow.
- 2) Time: Insert time of transfer. The default time value showing in the form is the local time using 24-hour clock. E.g. 4:30PM to be shown in the form as below as highlighted in green.

Transfer (Local)				
Date	Time			
24Apr13	1630			

# LUC Message (IATA Syntax)

### LUC

.PMC37285R7/01AUG13/0353/YYPANALP/CV/FRA/172-03247128/FRA/SER
.PMC33177R7/01AUG13/0353/YYPANALP/CV/FRA/172-13247128/FRA/DAM
.PMC39470R7/01AUG13/0353/YYPANALP/CV/FRA/172-23247128/FRA/SER

SITTL 3 NETS, - DOORS, - STRAPS, - FITTING

ODLN CODE: SB

DAM DESCP PMC33177R7 - 5CMS CUT ON THE BASE

TTL 40 STRAPS

### **Additional Details**

- ✓ Date of transfer
  - If 4 digit year is used then century precedes year
  - o If 2 digit year is used then it is year without century

### **4.3 TRANSFERRED BY**

Indicate the party transferring the ULD.

- If an airline, enter the two-character airline code.
- If not an airline, using up to fifteen-character of unique login name of transferring party.

After message is saved, system will auto generated LUC message. If it is a non-airline, system will auto add 'YY' into LUC.

### **Additional Details**

✓ Allow user to select the list of available participants' unique login name

### **4.4 RECEIVED BY**

Indicate the party receiving the ULD.

- If an airline, enter the two-character airline code.
- If not an airline, using up to fifteen-character of unique login name of receiving party

After message is saved, system will auto generated LUC message. If it's a non-airline, system will auto add 'YY' into LUC. All the space will be automatically trimmed out.

Sample of 'Transferred By' & 'Received By' data from 'E-UCR' in 'LUC'

#	IATA ULD ID CODE		Transfer (Local)		TRASNFERED BY	RECEIVED BY	
	ULD Type	ULD Number	Owner Code	Date	Time	TRASNIFERED DT	RECEIVED BY
1	PMC	37285	R7	01Aug13	0353	CV	PANALP
2	PMC	33177	R7	01Aug13	0353	cv	PANALP
3	PMC	39470	R7	01Aug13	0353	cv	PANALP
4	,			4 6			
5							
6					/		
7							
8	, ,				//		
9							
10							
n LUC N	nessage (IAT)	A Syntax)		/			
LUC .PMC .PMC	37285R7/01A 33177R7/01A	UG13/0353/YYPA UG13/0353/YYPA UG13/0353/YYPA	NALP/CV/FRA	/172-132471	28/FRA/D	AM	
SI TTL 3 NETS, - DOORS, - STRAPS, - FITTING							
ODLN CODE: SB							
DAM DESCP PMC33177R7 - 5CMS CUT ON THE BASE							
TTL 4	TTL 40 STRAPS						

COMMENT: A decision was made to change the sequence of parties on the sample form, with transferring party on the left and receiving party on the right, even though not consistent with the current LUC message format (in fact the opposite of the sequence on the LUC message with receiving party on the left and transferring party on the right). The reason for the change is that the working group strongly felt that this was more logical and would be easier for the new users (non-airlines). Possible impact to be evaluated.

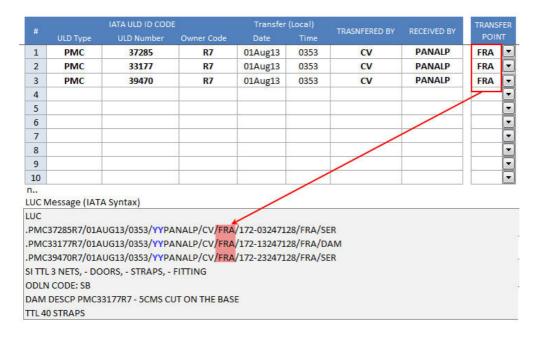
# **Additional Details**

✓ Allow user to select the list of all participants' unique name

### 4.5 TRANSFER POINT

Insert three-letter designator of airport code where the transfer took place.

Sample from 'E-UCR' into 'LUC'



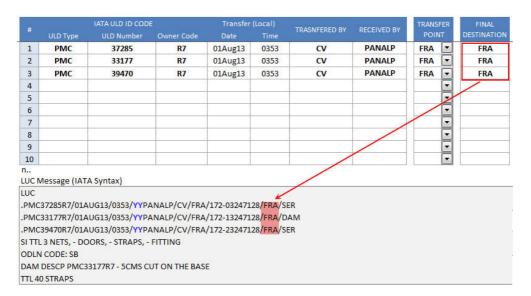
### **Additional Details**

- ✓ User need to key in 'Airport Code'
- ✓ Number of Airport codes configured for each company, which will be in the selected list of transferred station

### **4.6 FINAL DESTINATION**

Insert three-letter designator of airport code for which each unit is destined.

Sample from 'E-UCR' into 'LUC'



### **Additional Details**

✓ User need to key in 'Airport Code'

### 4.7 DEMURRAGE CODE

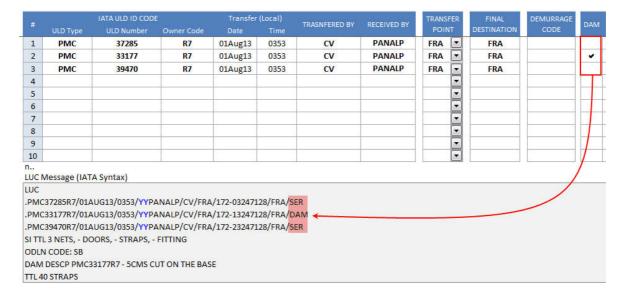
There are some demurrage code keys as listed below

- ✓ BCC: Or Beyond Carrier's Control. It is used when a unit has been released from a container station/bonded warehouse, the receiving party will return the unit to the ULD owner using a ULD Control Receipt and in order to indicate that the delay in the return of the unit was caused by conditions beyond the control of the receiving carrier, the receiving carrier will insert "BCC" in the "Demurrage Code" box
- ✓ ZZZ: It is used when ULD is transferred as 'Courtesy Move, insert "ZZZ" in the "Demurrage Code" box
- ✓ HHH: It is used when an owner carrier lends ULDs to another carrier due to that carriers shortage of units the control receipt will be completed with "HHH" in the "Demurrage Code" box

### **4.8 DAM**

It is a checked box used only if ULD is damaged. If the box is marked, the condition code will be shown in LUC message as 'DAM', otherwise 'SER'

Sample from 'E-UCR' into 'LUC'



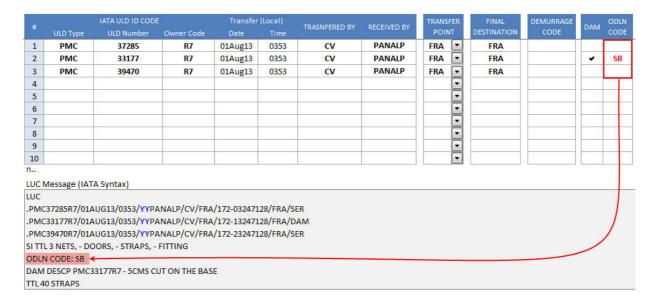
### 4.9 ODLN Code

Refer to Section 1.4.7 from ULD Regulations 1<sup>st</sup> Edition (Effective 1<sup>st</sup> January 2013),

"Accordingly, at the time of any ULD transfer it must be checked by both parties that each ULD meets the applicable airworthiness criteria and other requirements, including presence of the maximum allowable damage information covered by the Operational Damage Limit Notice (ODLN, see Section 7, Standard Specifications 40/3 or 40/4) This must be duly recorded. From there on responsibility for handling, inspecting and controlling the ULD's airworthiness and acceptability on the aircraft remains that of that accepting Operator (carrier) till it is handed back to its owner"

There will be a help file as a reference how to key in two digits ODLN code, and the file will refer from section 7, Standard Specifications 40/3 or 40/4

### Sample from 'E-UCR' to 'LUC'



### **Additional Details**

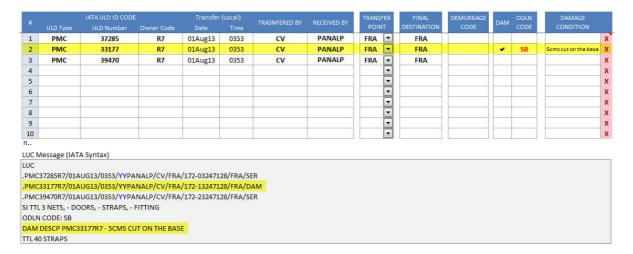
- ✓ Until further changes in LUC's specification. All additional details will be put under SI.
- ✓ A separator between keyword and the value e.g. : (colon) or ; (semi-colon) or := is needed to be agreed.

### **4.10 DAMAGE DESCRIPTION**

After mark check in 'DAM' box, specify details of nature of the irregularity of that ULD into "Damage Description" box; otherwise leave as 'blank'

The specified details will be put under supplement information (SI)

Sample from 'E-UCR' to 'LUC'

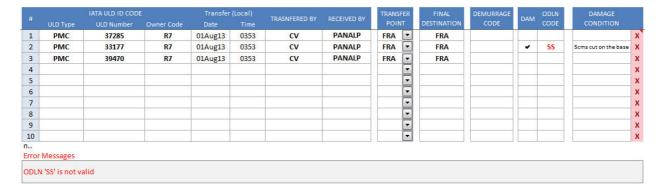


# 5. Error Messages & Remarks/Supplement Information

### 5.1 Error Message

This area is used to identify when user try to save message and input information is not correct according to business logic or syntax rules.

### For example



## **5.2 Supplement Information (SI)**

A free text field use to insert other required remarks, if any. Any additional information from this part will also be put under supplement information (SI) in LUC message.

Sample from 'E-UCR' to 'LUC'

### Remarks/ Supplement Information

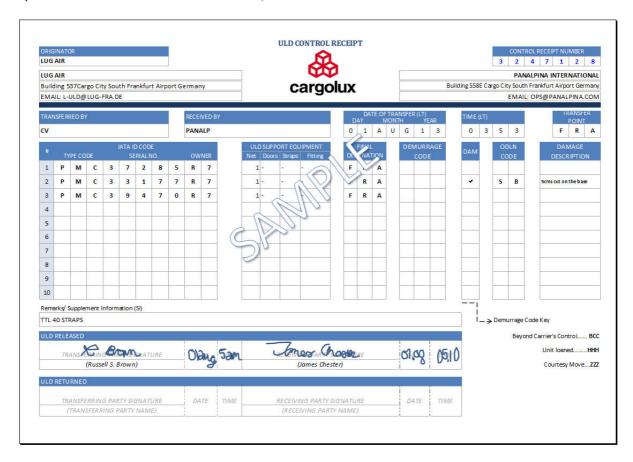


### LUC Message (IATA Syntax)

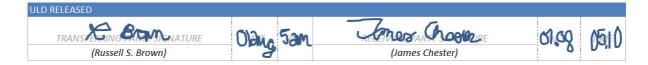


# **6. SAMPLE PRINTED E-UCR**

System will allow user to click 'Print UCR', which will show on screen.



System will allow user to sign on glass of their signature as a proven on releasing ULD or returning ULD.



# 7. LUC Message (IATA Syntax)

Once E-UCR is saved, and there is no error, system will also generate LUC message. LUC will be shown in this area, and once user click at Send & Save button, LUC message will also be sent to relevant parties as configured.

Sample from 'Sent LUC'

From: L-ULD@LUG-FRA.DE

To: OPS@PANALPINA.COM

cc: HDQUPXD@UNITPOOL.COM

### LUC

.PMC37285R7/01AUG13/0353/YYPANALP/CV/FRA/172-03247128/FRA/SER

.PMC33177R7/01AUG13/0353/YYPANALP/CV/FRA/172-13247128/FRA/DAM

.PMC39470R7/01AUG13/0353/YYPANALP/CV/FRA/172-23247128/FRA/SER

SI TTL 3 NETS, - DOORS, - STRAPS, - FITTING

ODLN CODE: SB

DAM DESCP PMC33177R7 - 5CMS CUT ON THE BASE

TTL 40 STRAPS

# **ULD EXCHANGE CONTROL (LUC) MESSAGE TEXT DESCRIPTION**

### LINE

The elements are grouped by level and are referenced in decimal sequence

### **STATUS**

"M" indicates mandatory status — must be entered.

"C" indicates conditional status — entry dependent upon certain circumstances and/or the presence of other information.

"O" indicates optional status — entry of information if known is at the option of the sender.

### **Element**

The description of each element indicates the type of information required.

"Standard Message Identifier" (SMI) is an approved three-letter code which is shown at the beginning of a standard message text and is used uniquely to identify a given type of message. It shall be shown separately on the first line after the address envelope.

### **Separator Characters**

General rules for message construction allow the use of  $\rightarrow$ , /, ..., -,  $\equiv$  as separator characters

### **Syntax Rules**

For the clear description of Standard Message Texts (SMT) standardized symbols are used to describe formats as set out in the ATA/IATA Interline Communications Manual. These symbols and their meaning are as follows:

- a represents a single alphabetic character
- f represents a single numeric character
- m represents mixed alpha (characters A through Z) and figures (numerals 0 through 9); excludes graphics, spaces, and other special characters
- t represents a character in free form text (alphabetic, numeric, graphic or space)
- () brackets framing the symbols "a", "f" or "t" indicate the optional status of the character(s)
- .[N] indicates a number N of characters or group of characters (in this case to avoid confusion the group will be underlined), e.g.:
   a[N] represents a number N of alphabetic characters
   aaa[N] represents a number N of the group of 3 alphabetic characters
- [..N] indicates a number of characters up to and including a number N

- [M..N] indicates M is lower limit and N is the upper limit inclusively
  - ↑ indicates a figure shift (in Alphabet No. 2)
  - ↓ indicates a letters shift (in Alphabet No. 2)
  - $\rightarrow$  indicates a space character; a number of space characters is indicated by  $\rightarrow$ [N] or  $\rightarrow$ [..N]
  - < indicates a carriage return
  - indicates a line feed onto the next line; a number of line feeds is indicated by  $\equiv [N]$  or  $\equiv [..N]$

# **ULD EXCHANGE CONTROL MESSAGE (LUC)**

To transmit from any location to an airline headquarters, the basic details of the transfer of liability for a ULD from one party to another

Ref. No.	Status	Element	Character Format	Example of Element
1.	М	Standard Message Identification		
1.1	М			LUC
1.2 M		Separator	CRLF	<=
2 M		ULD Details		
2.1	М	ULD Identification		
2.1.1	М	ULD Type	amm	AKE
2.1.2	М	ULD Serial Number	mfff(f)	12345
2.1.3	М	ULD Owner Code	aa fa or af	AA
2.2	М	Separator	Slant	/
2.3	М	Date of Transfer	Ffaaaff(ff)	01NOV2000
2.4	М	Separator	Slant	/
2.5	М	Time of Transfer	ffff	0001
2.6	М	Separator	Slant	/
2.7	М	Receiving Party Details		
2.7.1	М	Carrier's Code (receiving)	aa fa or af	AA
2.7.2	С	Non-Carrier identifier (if Carrier's code is YY)	t[6]	EMERY
2.7.3	М	Separator	Slant	/
2.8	М	Transferring Party Details		
2.8.1	М	Carrier's Code (transferring)	aa fa or af	BA
2.8.2	С	Non-Carrier identifier (if Carrier's code is YY)	t[6]	MEADOW
2.8.3	М	Separator	Slant	/
2.9	М	Location (of Transfer)	aaa	ORD
2.10	М	Separator	Slant	/
2.11	М	ULD Control Receipt Number	fff-f[4]f[4]	125*123456
2.12	М	Separator	Slant	/
2.13	М	Location (of Final Destination)	aaa	LAX
2.14	М	Separator	Slant	/
2.15	М	ULD Condition Details		
2.15.1	С	ULD Serviceable Code (either enter SER) or	aaa	SER
2.15.2	С	ULD Damage Code (DAM must be entered)	aaa	DAM
2.16	М	Separator	CRLF	<=
		Note: Element 2-2.16 can be repeated six times		
2.17	0	Supplement Information		
2.17.1	М	Supplement Identifier	aaa	OSI
2.17.2	М	Separator	Space	
2.17.3	М	Free text	t[65]	TEXT
2.18	М	Separator	CRLF	<=

<sup>\*</sup> Separator following three numeric Airline Accounting Code number can either be a dash or a space

<sup>\*\*</sup> Date of Transfer – if 4 digit year is used then century precedes year

<sup>-</sup> if 2 digit year is used then it is year without century