



THE NEW ICAO PACKING INSTRUCTIONS

LabelMaster DGIS IV

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Chicago, Illinois

INTRODUCTIONS



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WHY ARE WE HERE?

○ Overall Workshop Objectives:

- Review existing Packing Instructions
- Examine some specialized packing issues
- Practical applications



WHY ARE WE HERE?



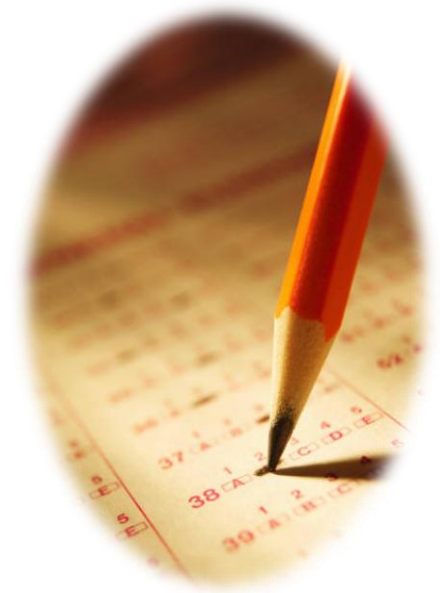
○ Overall Workshop Objectives:

- New ICAO Packing Instructions
- Reality Check – how change will affect your approach to training/assisting clients



POP QUIZ!

- To test your current PI knowledge
- Learn from each other
- Open areas of discussion!



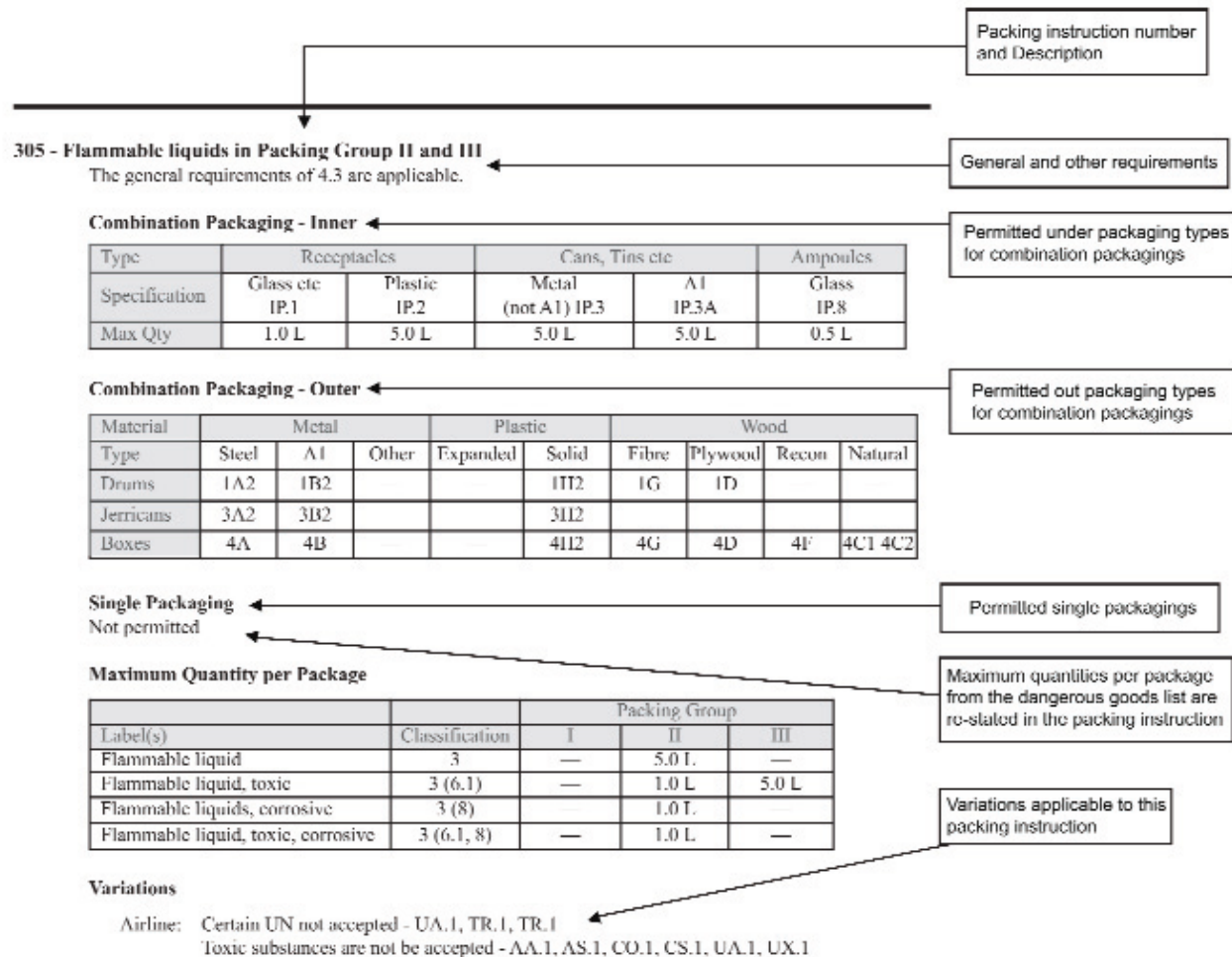
PACKING INSTRUCTION REVIEW

○ **Key Points:**

- How do we get to the right Packing Instruction?
- What influences our decision?
- What does a Packing Instruction really tell us?
- How can choosing the wrong PI, or not following the PI, impact a company?



ANATOMY OF A PACKING INSTRUCTION



ANATOMY OF A PACKING INSTRUCTION

305 - Flammable liquids in Packing Group II and III

The general requirements of 4.3 are applicable.

Combination Packaging - Inner

Type	Receptacles		Cans, Tins etc		Ampoules
	Glass etc IP.1	Plastic IP.2	Metal (not A1) IP.3	A1 IP.3A	Glass IP.8
Max Qty	1.0 L	5.0 L	5.0 L	5.0 L	0.5 L

Types of packagings

Maximum quantities per package from the dangerous goods list are re-stated in the packing instruction

Combination Packaging - Outer

Material	Metal			Plastic		Wood			
	Steel	A1	Other	Expanded	Solid	Fibre	Plywood	Recon	Natural
Drums	1A2	1B2	—	—	1H2	1G	1D	—	—
Jerrycans	3A2	3B2	—	—	3H2	—	—	—	—
Boxes	4A	4B	—	—	4H2	4G	4D	4E	4C1 4C2

Material of construction

UN specifications

Single Packaging

Not permitted

Maximum Quantity per Package

Label(s)	Classification	Packing Group		
		I	II	III
Flammable liquid	3	—	5.0 L	—
Flammable liquid, toxic	3 (6.1)	—	1.0 L	5.0 L
Flammable liquids, corrosive	3 (8)	—	1.0 L	—
Flammable liquid, toxic, corrosive	3 (6.1, 8)	—	1.0 L	—

Maximum quantities per package from the dangerous goods list are re-stated in the packing instruction. Labels for each classification are also specified.

Variations

Airline: Certain UN not accepted - UA.1, TR.1, TR.1
 Toxic substances are not be accepted - AA.1, AS.1, CO.1, CS.1, UA.1, UX.1

Variations applicable to this packing instruction



OVER TO THE EXPERTS

- Howard Skolnik

Closure Instructions





**WELL DESERVED
BREAK!**

Back in 10 minutes please

THE NEW ICAO PACKING INSTRUCTIONS

- History –Reason for the change
 - Original – 1983 (based partly on RAR)
 - UN packing instructions
- Rationalized approach
- Remove anomalies or errors
- Drafts
 - Old
 - UN
 - New



THE NEW ICAO PACKING INSTRUCTIONS

- Public comment
- Industry
 - Shippers
 - Operators
- Regulators
- Trainers



FINAL VERSION

- Numbering system remains 3 digit code
 - Not the alpha-numeric code proposed
- Inner packaging codes removed
 - Responsibility of shipper
- Rationalized inner quantities
- Secondary means of closure
 - Leakproof liner



FINAL VERSION



- As wide a selection of packagings as possible
- As closely harmonized with UN as possible
- Enhance safety/User friendly appearance

Available for download at:

www.icao.int/anb/FLS/DangerousGoods/PackingInstructions



RATIONALIZED APPROACH - PAX

CLASS / AIRCRAFT TYPE	PACKING GROUP	SUBRISK	IP TYPE	INNER QTY	QTY / PACKAGE	OTHER CONSIDERATIONS
CLASS 3	PASSENGER					
350	I	8	Glass	0.5 L	0.5 L	
			Plastic	F		
			Metal	0.5 L		
351	I	NONE	Glass	0.5 L	1.0 L	
			Plastic	F		
			Metal	1.0 L		
352	II	8, 6.1, 6.1 + 8, AND NONE	Glass	1.0 L	1.0 L	mercaptans
			Plastic	1.0 L		
			Metal	1.0 L		
353	II	NONE	Glass	1.0 L	5.0 L	
			Plastic	5.0 L		
			Metal	5.0 L		
354	III	8	Glass	2.5 L	5.0 L	
			Plastic	5.0 L		
			Metal	5.0 L		
355	III	6.1 AND NONE	Glass	2.5 L	60.0 L	
			Plastic	10.0 L		
			Metal	10.0 L		



RATIONALIZED APPROACH – LTD QTY

LTD QTY			Metal	10.0 L	
Y340	II	8	Glass	0.5 L	
			Plastic	0.5 L	0.5 L
			Metal	0.5 L	
Y341	II	6.1 AND NONE	Glass	0.5 L	
			Plastic	0.5 L	1.0 L
			Metal	0.5 L	
Y342	III	8	Glass	1.0 L	
			Plastic	1.0 L	1.0 L
			Metal	1.0 L	
Y343	III	6.1	Glass	1.0 L	
			Plastic	1.0 L	2.0 L
			Metal	1.0 L	
Y340	III	NONE	Glass	2.5 L	
			Plastic	10.0 L	10.0 L
			Metal	10.0 L	



RATIONALIZED APPROACH - CAO

CARGO						
360	I	8, 6.1 + 8 AND NONE	Glass	1.0 L	2.5 L	mercaptans
			Plastic	F		
			Metal	2.5 L		
361	I	6.1 AND NONE	Glass	1.0 L	5.0 L	
			Plastic	F		
			Metal	5.0 L		
362	II	8	Glass	1.0 L	5.0 L	
			Plastic	1.0 L		
			Metal	1.0 L		
363	II	8, 6.1 + 8,	Glass	2.5 L	5.0 L	mercaptans
			Plastic	2.5 L		
			Metal	5.0 L		
364	II	6.1 AND NONE	Glass	2.5 L	60.0 L	
			Plastic	5.0 L		
			Metal	10.0 L		
365	III	8	Glass	5.0 L	60.0 L	mercaptans
			Plastic	10.0 L		
			Metal	25.0 L		
366	III	6.1 AND NONE	Glass	5.0 L	220.0 L	
			Plastic	10.0 L		
			Metal	25.0 L		



CLASS 3 – LIMITED QUANTITY

Class 3 Packing Instructions

Packing Instructions Y340 – Y344
Limited Quantities Only
Passenger and Cargo Aircraft
<p>General Requirements Part 4 Chapter 1 requirements must be met (except that 4: 1.1.2, 1.1.8 c, 1.1.8 e and 1.1.16 do not apply) including:</p> <p>1) Compatibility Requirements</p> <ul style="list-style-type: none">• Substances must be compatible with their packagings as required by 4: 1.1.3;• Metal packagings must be corrosion resistant or with protection against corrosion for substances with a class 8 sub risk. <p>2) Closure Requirements</p> <ul style="list-style-type: none">• Closures must meet the requirements of 4: 1.1.4. <p>3) Limited Quantity Requirements</p> <ul style="list-style-type: none">• Part 3 Chapter 4 requirements must be met including:<ul style="list-style-type: none">• the capability of the package to pass a drop test of 1.2m;• a 24 hour stacking test;• Inner packagings for liquids must be capable of passing a 95kPa pressure differential test (4:1.1.6).



CLASS 3 – LIMITED QUANTITY

COMBINATION PACKAGINGS						SINGLE PACKAGINGS		
Packing Instruction	Packing group	Inner Packaging (see 6: 3.2)	Inner packaging quantity (per receptacle)	Total Quantity Per Package	Total gross mass per package			
Y340	II	Glass	0.5L	0.5L	30kg	NO		
		Plastic	0.5L					
		Metal	0.5L					
Y341	II	Glass	0.5L	1.0L		30kg	NO	
		Plastic	0.5L					
		Metal	0.5L					
Y342	III	Glass	1.0L	1.0L			30kg	NO
		Plastic	1.0L					
		Metal	1.0L					
Y343	III	Glass	1.0L	2.0L	30kg			NO
		Plastic	1.0L					
		Metal	1.0L					
Y344	III	Glass	2.5L	10.0L		30kg		NO
		Plastic	5.0L					
		Metal	5.0L					



CLASS 3 – LIMITED QUANTITY

OUTER PACKAGINGS OF COMBINATION PACKAGINGS (see 6.3.1)

Boxes	Drums	Jerricans
Aluminium	Aluminium	Aluminium
Fibreboard	Fibre	Plastics
Natural wood	Plastics	Steel
Plastics	Other Metal	
Plywood	Steel	
Reconstituted wood		
Steel		



PRACTICAL CONCERNS

- How will the implementation of these new PI's impact an organization?
- What organizational components do you need to look at in planning your training program?



PRACTICAL CONCERNS

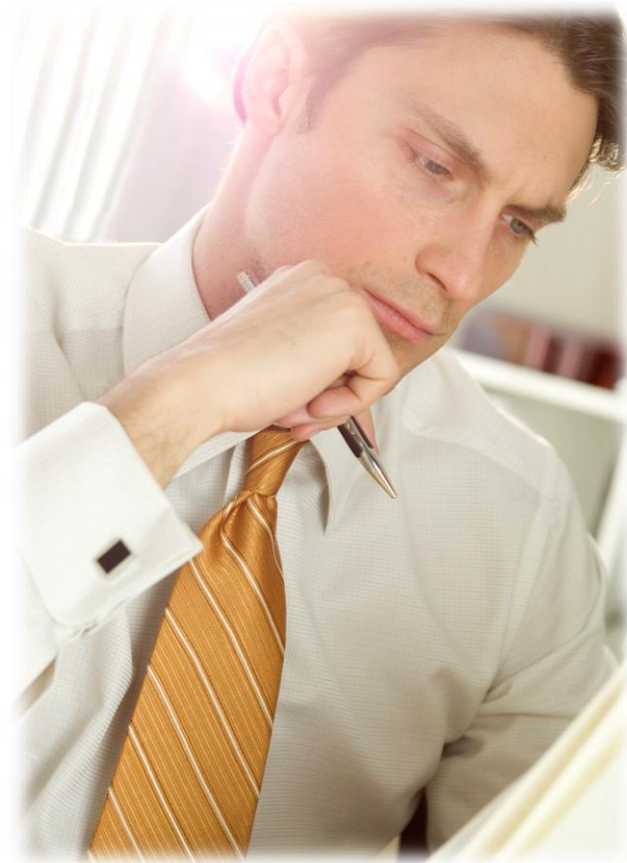


- How will the change to a company's procedures be communicated?
- What additional types of training may be required and to whom?



PRACTICAL CONCERNS

- Needs analysis
- Audit
- Decision tree
- Process map
- Checklist application



FINAL COMMENTS

- Advance preparation
- Needs analysis
- Practical considerations



THANK YOU from the DGIS IV Packing
Instruction Team

