行政院及所屬各機關出國報告

(出國類別:實習)

危險物品檢查員在職訓練

服務機關:交通部民用航空局

出國人 職 稱:科長

姓 名:莊瑞華

出國地區:美國

出國期間:91.11.30~91.12.14

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危險物品檢查員在職訓練

主辦機關:

交通部民用航空局

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出國類別: 實習出國地區: 美國

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關鍵詞: 危險物品,檢查員,在職訓練

內容摘要: 依國際民航公約第十八號附約第十一章遵守事項規定: 爲配合危險物品法

規之實施,締約國應建立檢查、監督及強制執行程序。該程序應包括檢查 文件、貨物及航空器使用人之操作規定,並提供調查涉嫌違規行爲之方 法。民航局參照國際民航公約第十八號附約之規定,現正著手修定民用航 空法有關危險物品空運相關條文,及增訂條文授權民航局訂定危險物品空 運管理辦法,並硏擬危險物品檢查員手冊,以指導檢查員執行危險物品空 運檢查、監督及強制執行程序。本項訓練由民航局指派符合國際民航組織 危險物品航空安全運送技術指南、國際空運協會危險物品處理規則初始訓 練及定期複訓人員,赴美國聯邦航空總署舊金山國際辦公室接受危險物品 檢查員在職訓練。本訓練由聯邦航空總署舊金山國際辦公室指派資深危險 物品檢查員,提供危險物品意外事件調查技術、危險物品限制、分類、識 別、封裝、文件及訓練等實務課程之講解,並由該檢查員指導至中華航空 公司舊金山貨運站、聯邦快遞公司奧克蘭國際機場危險物品收運及裝載區 域中心、美國航空公司舊金山維修中心(危險物品維修器材部份)等單位, 實際執行危險物品收運、儲存、裝載、訓練及公司物品(危險物品)管 理、託運之檢查作業。訓練課程並包括參訪中華航空公司貨運部門於舊金 山地區收運危險物品之最大託運人Applied Biosystems公司,觀摩該公司之 危險物品管理、封裝、標示、文件製作、交運及訓練;並觀摩聯邦快遞公 司派駐該公司之危險物品收貨人員之檢查作業。訓練期間並配合舊金山國 際辦公室邀請聯邦航空總署邁阿密飛航標準分區辦公室資深飛安檢查員, 蒞臨辦理專業訓練,實施航空貨物裝載實務訓練及至華航舊金山貨運站實 習航空貨運裝載檢查。檢查員除接受危險物品空運檢查實務訓練外,並收 集美國聯邦航空總署有關危險物品空運之相關規定、危險物品包裝製造、 檢驗資訊,並建立溝通管道,對我國辦理危險物品空運檢查系統建立及持 續辦理危險物品檢查作業,將可提供協助與諮詢之服務。

本文電子檔已上傳至出國報告資訊網

危險物品檢查員在職訓練報告書

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摘要

依國際民航公約第十八號附約第十一章遵守事項規定:為配合危險物品法規之實施,締約國應建立檢查、監督及強制執行程序。該程序應包括檢查文件、貨物及航空器使用人之操作規定,並提供調查涉嫌違規行為之方法。

民航局參照國際民航公約第十八號附約之規定,現正著手修定民 用航空法有關危險物品空運相關條文,及增訂條文授權民航局訂定危 險物品空運管理辦法,並研擬危險物品檢查員手冊,以指導檢查員執 行危險物品空運檢查、監督及強制執行程序。

本項訓練由民航局指派符合國際民航組織危險物品航空安全運送技術指南、國際空運協會危險物品處理規則初始訓練及定期複訓人員,赴美國聯邦航空總署舊金山國際辦公室接受危險物品檢查員在職訓練。

本訓練由聯邦航空總署舊金山國際辦公室指派資深危險物品檢查員,提供危險物品意外事件調查技術、危險物品限制、分類、識別、封裝、文件及訓練等實務課程之講解,並由該檢查員指導至中華航空公司舊金山貨運站、聯邦快遞公司奧克蘭國際機場危險物品收運及裝載區域中心、美國航空公司舊金山維修中心(危險物品維修器材部份)等單位,實際執行危險物品收運、儲存、裝載、訓練及公司物品(危險物品)管理、託運之檢查作業。訓練課程並包括參訪中華航空公司貨運部門於舊金山地區收運危險物品之最大託運人Applied

Biosystems公司,觀摩該公司之危險物品管理、封裝、標示、文件製作、交運及訓練;並觀摩聯邦快遞公司派駐該公司之危險物品收貨人員之檢查作業。訓練期間並配合舊金山國際辦公室邀請聯邦航空總署邁阿密飛航標準分區辦公室資深飛安檢查員,蒞臨辦理專業訓練,實施航空貨物裝載實務訓練及至華航舊金山貨運站實習航空貨運裝載檢查。

檢查員除接受危險物品空運檢查實務訓練外,並收集美國聯邦 航空總署有關危險物品空運之相關規定、危險物品包裝製造、檢驗資 訊,並建立溝通管道,對我國辦理危險物品空運檢查系統建立及持續 辦理危險物品檢查作業,將可提供協助與諮詢之服務。

壹、 目的

依國際民航公約第十八號附約(Annex 18 to the Convention on International Civil Aviation, Annex 18)第十一章遵守事項規定:為配合危險物品法規之實施,締約國應建立檢查、監督及強制執行程序。該程序應包括檢查文件、貨物及航空器使用人之操作規定,並提供調查涉嫌違規行為之方法。為符 Annex 18 之規定,民航局積極建立危險物品檢查制度,並培訓符合國際規定之危險物品檢查員。本項訓練選派符合 Annex 18 及國際航空協會 (International Air Transport Association, IATA) 危險物品處理規則(Dangerous Goods Regulations, DGR)危險物品訓練合格人員,赴美國聯邦航空總署實施危險物品檢查員在職訓練。

本項訓練由美國聯邦航空總署舊金山國際辦公室(SFO-IFO)指派資深危險物品檢查員,提供危險物品意外事件調查技術、危險物品限制、分類、識別、封裝、文件及訓練等實務課程之講解,並由該檢查員指導至中華航空公司舊金山貨運站、聯邦快遞公司奧克蘭國際機場危險物品收運及裝載區域中心、美國航空公司舊金山維修中心維修器材(危險物品部份)等單位,實際執行危險物品收運、儲存、裝載、訓練及公司物品(危險物品)管理、託運之檢查作業。訓練課程並包括參訪中華航空公司貨運部門於舊金山地區收運危險物品之最大託運人Applied Biosystems 公司,觀摩該公司之危險物品管理、封裝、標示、文件製作、交運及訓練;觀摩聯邦快遞公司派駐該公司之危險物品收貨人員之檢查作業。訓練期間並配合舊金山國際辦公室邀請聯邦航空總署邁阿密飛航標準分區辦公室資深飛安檢查員,蒞臨辦理專業訓練,實施航空貨物裝載實務訓練及至華航舊金山貨運站實習航空貨運裝載檢查。

貳、過程:

一、91.11.30 台北 - 舊金山 : 行程

二、91.12.01 舊金山 :報到

三、91.12.02 - 12.12 舊金山 : 在職訓練

六、訓練課程表如下:

<u> </u>		外环在农业上,		
日	期	課程	地 點	講師
12/2	2	1.危險物品事件之調查、報	SFO-IFO	Michael Givens
(-))	告與強制執行		
		2.危險物品檢查員手冊、檢		
		查員裝備		
12/3	3	1.拜會舊金山機場安全主	SFO Airport	Michael Givens
(二))	任		
		2.參訪 Korean Air 及 ANA		
		貨運站		
		3. ANA 貨機裝載檢查		
		4. CAL 貨運站場站檢查		
		5.CAL 貨機裝載檢查		
12/4	1	1.危險物品包裝	SFO-IFO	Michael Givens
(三))	2.CAL 貨運站危險物品訓	SFO Airport	
		練紀錄檢查		
		3.CAL 貨機危險物品裝		
		載、文件、貨盤檢查		
12/5	5	1.危險物品標記	SFO-IFO	Michael Givens
(四))	2.FAA CFR49 法規	SFO-IFO	
		3.CAL 貨運站危險物品文	SFO Airport	
		件檢查、Q Value 檢查		

日	期	課程	地 點	講師
12/6		1.CFR 49 法規	SFO-IFO	Michael Givens
(五))	2.ICAO TI		
		3.IATA DGR		
		4.放射性物質運送之輻射		
		防護		
12/9	•	1.CAL(Atlas)貨機組員訪談	SFO Airport	Michael Givens
(-))	2.CAL 貨機文件檢查	SFO Airport	
		3.CAL 危險物品託運文件	SFO Airport	
		檢查		
		4. 參訪託運人 Applied	Forster City	
		Biosystem		
		.參訪FedEx地區收貨中心	Hayward	
		.FedEx 貨機裝載檢查	Oakland Airport	
12/1	0 ا	Expanded Cargo Operations	SFO-IFO	Carmen Digiacomo
(=))	Survillance(ECOS)		Gary Cranford
12/1	1	ECOS 實務作業	SFO Airport	Carmen Digiacomo
(三))			Gary Cranford
12/1	12	1. AA 公司危險物品器材	AA SFO 維修棚	Michael Givens
(四))	(DGCOMAT)管理與運	場	
		送		
		2. 結訓	SFO-IFO	Andrew Edwards

參、心得

一、危險物品意外事件、失事事件之調查及報告

危險物品失事事件指空運危險物品造成人員之死亡或重傷害,或 財物重大損害之事件。危險物品意外事件指危險物品於運送時(不限 定於航空器上)發生危險物品失事以外事件,造成人員傷害、財物損 壞、著火、破損、外溢、液體之滲漏、輻射或包裝無法維持完整之事 件。任何與危險物品運送有關事件,致嚴重威脅航空器或機上人員 者,亦視同危險物品意外事件。

危險物品空運主管機關接獲航空器使用人之危險物品失事/意外 事件通報,應即派員執行檢查。

(一)檢查項目如下:

航空器使用人檢查項目

- 危險物品事件之性質
- 危險物品事件造成之初步傷亡或損壞
- 危險物品事件之通報(含失事及重大意外事件之通報飛安 委員會)
- 危險物品事件之緊急處理
- 危險物品運送之許可
- 危險物品之提單、託運人申報單、收運檢查表及收運檢查
- 危險物品之儲存
- 危險物品之併裝、拆、打盤
- 危險物品之裝載或卸載
- 危險物品損料之處理
- 危險物品資訊之標示、提供及機長通告
- 危險物品手冊、CAA 法規及 IATA 或 ICAO 文件
- 危險物品手冊審查與檢討
- 危險物品作業人員訓練紀錄
- 危險物品訓練計畫審查與檢討
- 航空貨運承攬業審查紀錄

託運人檢查項目(含航空器使用人公司危險物品器材之託運)

- 危險物品運送之申報
- 危險物品運送之限制
- 危險物品之分類
- 危險物品之識別
- 危險物品之包裝與封裝

- 危險物品包裝件之標籤與標記
- 危險物品運送之文件與證明
- 危險物品託運人訓練紀錄
- 危險物品託運人訓練計畫
- 航空器使用人公司器材之管理與託運作業

航空站檢查項目

- 航空站消防搶救處理情形
- 航空站危險物品事件處理情形

(二)檢查程序

接獲危險物品失事或意外事件通報,檢查員應即執行危險物品失事/意外事件檢查。檢查前應通知業者檢查行程,以確定檢查時有適當之管理階層人員出席。檢查時向業者簡報檢查之範圍並執行檢查。

(三)報告

離開檢查現場前,應向業者簡報說明檢查結果。如有缺點,應說明所需之追蹤改正行動。任何"發現(finding)"應報告督導員。

二、強制執行

美國國會認為不符合危險物品運送規定之任何危險物品運送型式,均構成危害大眾安全。於是,國會於 1974 年通過危險物品運輸法(Hazardous Materials Transportation Act, HMTA)。1990 年,國會決定為使危險物品運輸法更具效力,應採取強力之行動,乃另訂定危險物品運輸整合安全法(Hazardous Materials Transportation Uniform Safety Act)。該法案主要之變更為違反該法規之違規罰金提高至25,000 美元,對初次違規者每一違規事項至少處以250 美元罰金。1994年 HMTA 重新修訂,成為一般所稱之聯邦危險物品運輸法(Federal hazardous material transportation law)。復經多次修正,目前對違反聯邦危險物品運輸法之違規行為,最高得處以27,500 美元。

美國聯邦航空總署訂定危險物品違規處分指南(如附件一),供其 檢查員研擬違規事件之強制執行方案,該指南計分三項:

- (一)案件分析。
- (二)危險物品違規處分量罰表之使用說明。
- (三)其他法規因子之考量。

危險物品處分量罰表如附表一,危險等級表如附表二。

(一)案件分析

本章節含一系列之問題,協助檢查員及聯邦律師評估案件。 該系列問題供評估違規之性質、範圍及嚴重性、違規者之歷 史紀錄等因子。部份之因子已納入危險物品違規事件處分量 罰表。

1、違規之性質、範圍及嚴重性:

- (1) 空運託運、運送或收受之物質。如該物質屬 A 等級 危險物品,則應使用最大加權;如為 B 等級,則使 用中等加權;如為 C 等級,則使用最小加權。
- (2) 空運託運、運送或收受之物質數量。如其數量顯然 逾法規規定之限制數量,則應依其逾越數量使用中 等或最大加權。
- (3)該項運送是否造成人員、財產損傷或商業干擾。如 造成影響,應使用中等或最大加權。

2、違規者之過失程度:

- (1) 違規者是否為危險物品製造者。如是,考量最大權 重。
- (2) 是否經由違規者以外人員準備交運。如是,考量使 用中等或最小加權。
- (3) 違規者是否經由其來源獲得錯誤資訊。如是,考量 最小權重。
- (4) 違規者是否有違規歷史紀錄。如是,考量中等至最大加權。五年以前之違規,可使用較輕之權重,但持續之違規,不在此限。

3、其他因子:

每一案件應依其特性評估,經常許多案件呈現獨特性及 加重或減輕因子。如加重或減輕因子未在指南內,則檢 查員應決定一個加重或減輕因子,並詳加說明,以供法 務部門詳細衡量。例如,個別包裝件內含不同危險物品, 應使用加重因子。如該危險物品為不相容,其加重因子 須再提高。

4、決定案件之最後綜合權重:

各項問題個別權重經評估後,用以決定該案件之綜合權 重。前述問題無回復者,不納入評估。決定最後綜合權 重時,檢查員或聯邦律師應審慎考量其違規之因子及案 件特別事件之知識。最後綜合權重應予審慎分析後決 定,而非使用數學平均計算。單一權重可超越其他所有 權重,此情況下,檢查員或聯邦律師應予說明。

(二) 危險物品違規處分量罰表之使用說明

- 依表一選擇適當之個人或商業實體及與案件有關之違規事項,由交叉欄位所示各組違規處分額度內選擇適當者。
- 2、依案件分析所得權重,按最大、中等、最小權重決定各項違規之處分額度,並將該組之各項處分額度加總,同一組內未違規項目不納入計算。
- 3、量罰表之設計涵蓋危險物品法規之大部份違規事項,但 對特別案件其量罰額度仍可高於或低於額度範圍,但檢 查員於開具處分建議書之前,應與法務人員協商。
- 4、民航運輸業及其他航空器使用人經常託運、收受及運送 危險物品,此狀況下,該業者之違規處分應依表一商業 實體之規定處分。

(三)其他法規因子之衝擊

聯邦危險物品運送法亦要求考量違規者之行政罰付款能力; 行政罰對違規者能否持續其商業營運;及其他法規之規定, 此項考量將影響危險物品違規事件之量罰額度。聯邦律師得 依據違規人之繳付罰款能力,減輕建議之處分金額及所須之 改善計畫。

三、危險物品託運人 Applied Biosystems 公司

Applied Biosystems 為美國生化科技公司,設立於美國加州 Foster City,距離舊金山機場約20公里。該公司主要生產生化、基因等檢驗設備及檢驗設備所須耗材,該耗材部份為第3類易燃液體、第6.2類毒性物質、第8類腐蝕性物質等危險物品。該公司之危險物品空運政策採優先選擇直飛航線運送,以避免轉運造成危險物品運送之延遲及危險物品事件發生之可能性,因此,運往台灣地區之危險物品耗材均委託直飛台北中正機場之華航運送,且為華航在舊金山機場危險物品託運之主要客戶。為了解美國地區危險物品託運人之危險物品空運作業,經由在職訓練講師安排訪問該公司負責出貨及包裝部門資深經理 Mr. Kenneth S. Kormanak,並觀摩該公司之危險物品管理、封裝、標示、文件製作、交運及訓練。

Applied Biosystems 公司檢驗設備及耗材均使用電腦系統管理,其託運設備或耗材經電腦製作表單標示為危險物品者,交由危險物品處理門執行封裝、標記、標籤及文件製作。危險物品處理人員均依美國聯邦法規 CFR 49 危險物品運送規定,接受託運人之危險物品法規訓練及每年接受複訓,並於危險物品申報單託運人欄位簽署,電腦製作危險物品申報單樣本如附件二。電腦系統除依資料庫資料列印危險物品運送專用名稱、危險物品分類、聯合國編號、包裝等級、次要危險性、包裝指示等項目外,並列印個別內包裝之重(容)量及自動計算包裝件之 Q Value,以確保符合危險物品運送法規之規定。危險物品包裝件之封裝與標示,於專用工作台作業,並使用條碼標示及手提條碼閱讀機立即輸入電腦系統,作業照片如附圖一。

Applied Biosystems 公司於美國境內大部分危險物品及國際線部 份危險物品空運交由 FedEx 公司運送,由於其交運量大,FedEx 於該 廠派駐危險物品收運人員,直接於該廠檢查及收運危險物品包裝件。 如有危險物品包裝件之包裝、標籤、標記或文件不符合危險物品法規 之規定,則直接於場內退運。完成收運之危險物品包裝件,則直接由 該公司運送車輛載運至 FedEx 公司之區域轉運中心。

美國聯邦法規 CFR 49 危險物品運送法規對危險物品託運人有詳細之規範,對違反法規者施以處分(詳本報告強制執行章節)。此次參訪期間,FAA 危險物品檢查員兼施 Applied Biosystems 公司之危險物品作業檢查,檢查結果顯示其危險物品作業及人員訓練均符合該國法規。

四、危險物品作業檢查

- (一)危險物品收運人員訪談及檢查項目:
 - 1、受訓類別及依據標準。
 - 2、收運地點及儲存地點。
 - 3、是否使用收運檢查表?索取一份檢查表。
 - 4、是否限制客機載運危險物品及限制類別。
 - 5、是否曾於文件遞交前收到該危險物品包裝件。
 - 6、是否訂定危險物品包裝件之交運時間?截止時間為 何。
 - 7、如無訂定交運時間,於危險物品收運人員為在場時,如何收運託運物品。
 - 8、於收運檢查發現不符合規定包裝件之處理程序。
 - 9、拒絕收運時,是否於退運前影印危險物品申報文件。
 - 10、是否收運公司危險物品?由何部門交運?其頻率、類別及如何運送。

(二)貨運站督導或經理訪談及檢查項目:

- 1、 危險物品訓練紀錄保存於何處,可否提供檢查。
- 2、 該站收運及儲存危險物品位置。
- 3、 有多少人接受危險物品收運訓練,每席位有多少

人。

- 4、 收運危險物品使用之程序及檢查表。
- 5、 是否限制客機載運危險物品及限制類別。
- 6、 該站是否發生危險物品滲漏或意外事件。
- 7、 前項事件如何處理,是否有書面文件。
- 8、 是否熟悉危險物品作業違規之報告。
- 9、 危險物品如何準備運送及裝載於航空器上。
- 10、機長通知由何者填寫。
- 11、航空公司是否由合約公司提供機坪、旅客櫃台、 航空器維修、空廚、及旅客行李運送等作業人員。

(三)貨運作業人員訪談及檢查項目

- 1、是否收運危險物品,是否有其他人員收運危險物品。
- 如無危險物品收運人員在場,如何收運,文件如何 處理。
- 是否設置危險物品託運作業專用區域,未經收運檢 查之危險物品儲存於何處。
- 4、是否曾接受危險物品基本認識訓練,屬在職訓練或 課堂訓練。

(四)場站及行李處理代理之訪談及檢查項目:

- 1、最近一次參加危險物品訓練之日期。
- 發現貨物或旅客行李有液體外洩且具惡臭時,如何 處理。
- 3、裝載貨物上機時,其督導是否在機坪附近。
- 4、可否經由無線電或電話,要求協助。
- 5、緊急事件發生時,通知何者協助。
- 6、是否熟悉危險性標籤及標記,其形狀為何。
- 7、自擔任本項工作起,是否曾看過或處理危險物品包裝件,最近何時曾處理。
- 8、 危險物品包裝件裝載於航空器何處。

- 9、危險物品如何固定於航空器上。
- 10、何者決定危險物品包裝件之裝載位置,如何作業。
- 11、是否曾看過電池動力輪椅裝載於航空器上。
- 12、輪椅之類別及如何裝載。
- 13、輪椅裝載於航空器之何處,如何固定。
- 14、何者確認電瓶包裝是否正確,可否出示使用之包裝。
- 15、航空器使用人是否提供旅客使用氧氣,是否曾看 見航空公司於下或艙裝載氧氣瓶。

(五)航空器維修及補給人員訪談及檢查項目:

- 1、最近一次參加危險物品訓練之日期。
- 2、負責處理、包裝及儲存下列何項危險物品:
 - 氧氣瓶(組員、旅客使用氧氣瓶及供旅客於飛航時 使用之氧氣瓶)。
 - Personal Breathing Equipment(PBE, 第 2.2 類, 第 8 類危險物品)。
 - 航空器用電瓶。
 - 航空器用輪胎。
 - 氧氣產生器。
 - 燃料控制器。
 - 滅火器。
 - 航空器緊急逃生滑梯。
 - 航空器引擎及其零件。
 - 緊急逃生指示器(第7類)。
- 更換之航空器用電池、氧氣瓶、航空器輪胎由何處獲得。
- 4、 維修部門人數及補給部門人數。
- 5、 有多少人執行管理、封裝或搬運危險物品。
- 6、 維修部門接收危險物品人員是否全部接受危險物

品訓練。

- 7、詢問人員所接受之危險物品包裝及文件訓練類別、何時、及是否複訓。
- 8、 危險物品運送所參考之手冊、書籍及程序,提供支援之單位電話。
- 詢問是否使用交通部或其他相關主管機關,核發之 危險物品豁免許可。

(六)旅客報到櫃台作業人員訪談及檢查項目:

- 1、 最近一次參加危險物品訓練之日期。
- 2、 是否知悉危險物品標籤及標記,其形狀如何。
- 3、 是否曾看見或操作危險物品包裝件,最近是否有。
- 4、 曾見過之危險物品包裝件之類別,屬於託運行李或 小包裝件。
- 5、 何種類型包裝件可能被懷疑內裝危險物品:
 - 籤維板箱、背包(油燈、爐具、丙烷)、冷卻器(乾冰)、小冰桶(乾冰及傳染性物質)、滲漏之袋子或盒子、溼盒子(乾冰)、潛水裝備/氧氣/鋼瓶、打火機、丁烷火炬等。
- 6、 旅客可於行李內攜帶之酒精飲料最高酒精成份, (小於 24%者不受限制,大於 24%但小於或等於 70%者限 5 公升,大於 70%者禁止)。
- 7、旅客可攜帶之例外數量危險物品(含噴霧罐):●必須為醫療用品或化妝用品,每一旅客總量限2公斤或2公升,單件限0.5公斤或0.5公升)。
- 8、 是否允許於託運行李裝運防搶噴霧罐。
- 9、是否允許於託運或手提行李裝運乾冰,其數量為何。(託運行李並標示內含乾冰者,限2.3公斤,手提行李限2公斤)。
- 10、 旅客託運電動輪椅時,如何處理。是否允許

使用輪椅至登機口或需於櫃台託運。

11、 旅客行李可能內含危險物品時,櫃台人員如何處理。

(七)飛航組員訪談及檢查項目:

- 機長、正駕駛員、副駕駛員、飛航機械員之姓名及 危險物品訓練日期。
- 2、機上是否備有 ICAO DOC 9481 The Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods 或備有 Emergency Response Guidebook 或有關機載危險物品意外事件之緊急 應變程序。
- 3、 機上是否裝載危險物品,是否已收到機長通告。
- 4、 上一次機載危險物品之日期,該班機裝載何種危險 物品。
- 5、 公司是否禁止科機裝載危險物品,其類別為何。
- 6、 地勤人員通常於何時提供機長通告。
- 7、 是否按機長通告,實際檢查危險物品。
- 8、是否檢查危險物品運輸專用名稱及數量,確認其符合危險物品法規之限制。
- 是否經常載運電動輪椅,裝載輪椅時,是否通知組員。
- 10、 危險物品通常裝載於機上何位置,是否固定。
- 11、 旅客需要時,公司是否提供氧氣,公司如何 運送氧氣瓶,裝載於何處。
- 12、 飛航中發生失火、蒸氣、毒性氣味等危險物 品意外事件,如何處置。

五、危險物品檢查員配備

為保障危險物品檢查員之健康、確認危險物品運送符合法規規

定及利於檢查作業之執行,美國聯邦航空總署提供危險物品檢查員下 列配備:

- (一)噪音防制耳塞:危險物品檢查員通常需在機坪、維修棚廠等噪音防護區域執行檢查業務,為確保檢查員之健康,由工作單位提供噪音防制耳塞。
- (二)防護手套:危險物品檢查員工作環境需接觸危險物品包裝件,為防止包裝件破損或滲漏,造成危險物品意外事件,或意外接觸危險物品,檢查員均配置橡皮防護手套。
- (三)輻射強度偵測儀:放射性物質包裝件之輻射強度必須使用 輻射強度偵測儀,測量其輻射強度,以確認其符合危險物 品空運法規。
- (四)危險物品法規:危險物品檢查員配置美國聯邦法規 CFR 49,供其執行檢查業務時參考,並於檢查之發現,利於現 場通知受檢單位,有關法規之規定及建議之改善依據。
- (五)數位相機:危險物品檢查員執行檢查業務,發現包裝件破損、滲漏、未依規定裝載、隔離、或文件不符合規定時,即刻以數位相機拍照或複製文件。使用數位相機可利於資料之傳輸,並節省底片及照片沖洗之經費及時間,對檢查員之作業有極大之方便。

以上裝備均置於單一行李箱,以利外出檢查攜帶。噪音防制耳 塞及防護手套為消耗品,工作單位另提供檢查員備份耗材。

六、FedEx公司危險物品空運作業觀摩

FedEx 公司為全球最大快捷航空貨運公司,擁有六百四十餘架航空器,業務遍及二百一十個國家。該公司總部設於美國田納西州 Memphis,並為美國地區航空貨運之總轉運站,美國加州舊金山灣區之航空貨運轉運站則設於加州 Oakland。本次在職訓練期間,由講師安排參訪該公司之舊金山灣區航空貨運轉運站及觀摩該公司 Oakland 國際機場之危險物品作業。為配合該公司之危險物品收運及裝載作 業,本項參訪及觀摩於夜間實施。

FedEx舊金山灣區航空貨運由其車隊收運至 Oakland 轉運站,轉運站設有危險物品收受及暫存專區,並由專業人員執行危險物品收運檢查,檢附其非放射性物質包裝件收運檢查表如附件三、放射性物質包裝件收運檢查表如附件四,空運包裝件僅含乾冰者,使用非放射性物質包裝件收運檢查表,並僅執行其中深色列印之檢查項目部份。

FedEx 規定爆炸性物質、易燃氣體、易燃液體、易燃固體、自燃物質、禁水性物質、氧化物、有機過氧化物、腐蝕性物質,必須裝載於飛航中組員可處理之貨機主貨艙,禁止裝載於下貨艙等組員無法處理位置,且通常裝載於主貨艙之最前段位置,以利發生危險物品事件時,組員得迅速處理;非燃性氣體、冷凍氣體、毒性物質、傳染性物質、放射性物質、其他類危險物品及乾冰得裝載於主貨艙及下貨艙,但放射性物質應裝載於遠離組員位置,以避免輻射線外洩危害組員健康。檢附該公司機長通知單如附件五,該通知單由地面裝載單位製作,除標示各類危險物品裝載位置,並標示危險物品之相容性,供組員檢視危險物品之隔離。不相容之危險物品包裝件,不得裝載於相鄰位置。該通知單亦標示各機型得裝載乾冰之最大限制。

七、中華航空公司舊金山貨運站危險物品檢查訓練

- (一)手冊檢查:該站備有地勤作業手冊,內含危險物品作業規定。
- (二)場站檢查:檢查危險物品收運、倉儲、文件、危險物品裝載等作業,檢查結果正常。檢查作業人員訓練紀錄,顯示均按 美國聯邦法規 49 CFR 規定,接受危險物品法規訓練,並按 規定每年執行複訓一次。
- (三)B747-400F 貨艙檢查:檢查貨物裝載單、機長通知等文件正常,檢查貨艙發現由 Dallas 經舊金山轉運台北之 4.1 類易燃

固體危險物品包裝件一件,因裝載固定不當(如附圖二),其外型已變形(如附圖三)。經FAA檢查員要求拆卸該包裝件之固定貨網,檢視該包裝件研判其包裝尚無受損仍可運送。經重新調整貨網及固定位置後(如附圖四),同意繼續運送,該班機因此延遲十五分鐘起飛。訪談濕租自 Atlas 航空公司貨機駕駛員,該組員均熟知中華航空公司及美國聯邦航空總署之危險物品空運作業規定,其危險物品訓練均符合規定。

- 八、觀摩美國航空公司(AA)航空維修器材管理部門之危險物品管裡 及運送: AA 航空公司之維修器材均輸入電腦管理,其資料庫包 含危險物品維修器材之危險物品分類、運輸專用名稱、UN 編 號,包裝等級及物質安全資料表(Material Safety Data Sheet, MSDA)。維修器材託運文件使用電腦列印,其屬危險物品者並 列印物質安全資料表,除可提供危險物品運送包裝、檢查等作業 使用外,資料表內含之危險物品危害性質,並可提供運送及維修 人員之參考及緊急應變之依據。危險物品維修器材均依危險物品 隔離之規定儲存,維修器材及託運作業人員,均依規定接受危險 物品法規初訓及每年接受複訓。
- 九、訓練講師: Michael D. Givens,美國聯邦航空總署西區及太平洋區域辦公室危險物品檢查員。電子郵件地址:
 Michael. Givens@faa. gov
- 十、聯邦航空總署舊金山國際辦公室聯絡人:R. Andrew Edwards 經理,電子郵件地址:Robert.Andy.Edwards@faa.gov
- 十一、本項在職訓完訓後由美國聯邦航空總署舊金山國際辦公室發 給危險物品檢查在職訓練及航空貨運作業檢查訓練完訓證明(如 附件六、七)

肆、綜合檢討及建議

- 一、美國聯邦航空總署對危險物品空運之管理除訂定完備法規外,並提供完善之危險物品檢查員手冊,以作為檢查執行危險物品檢查之標準。此外,對危險物品運送違規之處分,另訂定危險物品違規處分指南,供其檢查員研擬違規事件之強制執行方案。檢查員執行危險物品檢查發現不符規定時,除按檢查員手冊規定填寫文件及通知當事人限期改正外,對違規事項之檢查報告及處分建議書經其主管核可後,移請律師執行處分相關事宜,檢查員不須對該項違規之處分程序持續參與,可節省檢查員之作業時間及免除後續繁瑣之處分作業,使檢查員得以專心辦理違規改正之後續追蹤及執行檢查業務。民航局飛航標準組之飛航安全檢查作業,宜參照聯邦航空總署之作業方式,指派專任人員,執行違規處分之相關作業,以利飛安檢查作業,提昇檢查員之作業品質。
- 二、美國聯邦航空總署危險物品檢查員執行檢查業務,配置有完備之 法規、檢查員手冊、檢查裝備、照相器材,並備有防噪音耳塞及 防護手套,以利檢查員執行業務並保護檢查員身心健康。民航局 飛航安全檢查作業性質與美國聯邦航空總署類似,宜提供必要之 設備及防護配備。
- 三、美國聯邦航空總署之危險物品檢查員,執行危險物品檢查作業範圍涵蓋航空器使用人、其客貨運地勤代理、航空貨運承攬業者及託運人。除於危險物品事件發生時,可經由全面之檢查以確認危險物品意外事件之責任外,並可經由平日持續檢查,發現作業缺失及追蹤改正,以防止危險物品意外事件之發生。危險物品檢查員同時亦定期訪談主要危險物品託運人,提供危險物品空運結詢及協助其改善作業,以確認託運人知悉危險物品空運規定,防止危險物品意外事件。民航局除飛航標準組已著手建立航空器載運危險物品之檢查作業外,宜對其他民航業者及託運人,加強危險物品作業之檢查及對託運人之訪查,以防止危險物品意外事件。

期必要之訓練,並可經由在職訓練,觀摩他國之危險物品檢查作業,研讀其法規、文件、操作儀器設備及國際危險物品法規之意見交流、並學習其對檢查員之身體防護,甚值得持續派員接受本項訓練。

五、聯邦航空總署危險物品檢查員除依聯邦航空法規 49 CFR 及相關規定檢查其國籍航空業者之危險物品作業外,並依據國際民航公約第十八號附約之規定,參照國際民航組織文件危險物品航空安全技術指南(Doc 9284 Technical Instructions for the Safety Transport of Dangerous Goods by Air, TI)之標準,執行境內外籍航空業者之危險物品作業檢查。民航局宜參考其作業方式,建立外籍航空業者於我國境內之危險物品作業檢查,以確認其作業符合國際規定,並防止危險物品事故之發生。

Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act of 1996 (Pub L. 104–121) provides generally for congressional review of agency rules A reporting requirement is triggered in instances where NCUA issues a final rule as defined by Section 551 of the Administrative Procedures Act. 5 U S.C 551. The Office of Management and Budget has determined that this rule does not constitute a major rule for purposes of the Small Business Regulatory Enforcement Fairness Act of 1996

List of Subjects in 12 CFR Part 701

Charitable contributions, Credit unions.

By the National Credit Union Administration Board on April 15, 1999 Becky Baker,

Secretary of the Board

For the reasons set forth above, NCUA amends 12 CFR part 701 as follows.

PART 701—ORGANIZATION AND OPERATION OF FEDERAL CREDIT UNIONS

1 The authority citation for part 701 continues to read as follows

Authority. 12 U S.C 1752(5), 1755, 1756, 1757, 1759, 1761a, 1761b, 1766, 1767, 1782, 1784, 1787, and 1789 Section 701 6 is also authorized by 31 U S C. 3717 Section 701.31 is also authorized by 15 U S C. 1601 et seq. 42 U S.C 1861 and 42 U S C 3601–3610 Section 701 35 is also authorized by 42 U S C 4311–4312

2 Part 701 is amended by adding § 701 25 to read as follows

§ 701.25 Charitable contributions and donations.

(a) A federal credit union may make charitable contributions and/or donate funds to recipients not organized for profit that are located in or conduct activities in a community in which the federal credit union has a place of business or to organizations that are tax exempt organizations under Section 501(c)(3) of the Internal Revenue Code and operate primarily to promote and develop credit unions.

develop credit unions.

(b) The board of directors must approve charitable contributions and/or donations, and the approval must be based on a determination by the board of directors that the contributions and/or donations are in the best interests of the federal credit union and are reasonable given the size and financial condition of the federal credit union The board of directors, if it chooses, may establish a budget for charitable contributions and/or donations and

authorize appropriate officials of the federal credit union to select recipients and disburse budgeted funds among those recipients.

[FR Doc 99-9931 Filed 4-20-99, 8:45 am]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 13

Federal Aviation Administration Policy on Enforcement of the Hazardous Materials Regulations: Penalty Guidelines

AGENCY: Federal Aviation Administration (FAA), DOT ACTION: General statement of policy.

SUMMARY: This document states that FAA policy on determining the sanction amounts in FAA enforcement actions addressing violations of the Department of Transportation Hazardous Material Regulations (HMR) This policy statement provides guidance for agency personnel in the exercise of the FAA's prosecutorial discretion in enforcement cases concerning transportation of hazardous materials by air. The guidance should aid in analysis of the facts and circumstances of each case so as to arrive at an appropriate sanction in light of the statutorily defined penalty considerations. The analytical framework should also promote a relative consistency in determining civil penalties for violations of the HMR EFFECTIVE DATE: April 14, 1999 FOR FURTHER INFORMATION CONTACT: Bill Wilkening, Office of Civil Aviation Security, Dangerous Goods and Cargo Security Division, telephone. (202) 267-9864, facsimile (202) 267-5760, email: Bill Wilkening@faa.gov, mailing address: ACO-800, 800 Independence Avenue, S.W., Washington, D.C. 20591, or Allan H Horowitz, Enforcement Division, Office of the Chief Counsel, telephone (202) 267–3137, facsimile (202) 267–5106, email Allan.Horowitz@faa.gov, mailing address: AGC-300, 800 Independence Avenue, S.W., Washington, D.C. 20591. SUPPLEMENTARY INFORMATION:

Background

Congress determined that the unregulated transportation of hazardous materials constitutes a threat to public safety in all forms of transportation Congress addressed that threat in 1974 by enacting the Hazardous Materials Transportation Act (HMTA) By 1990, Congress determined that effective

enforcement of the HMTA required more severe action, and enacted the Hazardous Materials Transportation Uniform Safety Act of 1990, Public Law No. 101-615, 1990 U.S. Code Congress & Admin. News 104 Stat 4605. The primary effect of this 1990 revision of the HMTA was to raise the maximum civil penalty for violation of any regulation enacted under the HMTA to \$25,000, and, for the first time, to require a \$250 minimum penalty for any such violation. The HMTA was recodified in 1994 and is now referred to as the "Federal hazardous material transportation law," 1994 U.S. Code Congress. & Admin. News 108 Stat 759, codified at 49 U.S C. 5101-5127. In the 1994 recodification, Congress specifically stated that the recodification created no substantive

change to the earlier form of the statute. The Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. 2461 (note), as amended by the Debt Collection Improvement Act of 1996, Public Law 104-134, April 26, 1996, provides a mechanism for adjustments for monetary civil penalties for inflation in order to maintain the deterrent effect of monetary civil penalties and promote compliance with the law Under the statute, the new civil penalty maximums cannot be applied unless they are implemented by regulation On December 20, 1996, the FAA published a final rule (61 FR 6744), implementing the statute for each civil penalty subject to the FAA's jurisdiction. On January 21, 1997, the FAA published a correction to the final rule (62 FR 4134). The final rule is codified at 14 CFR Part 13, Subpart H. Pursuant to 14 CFR 13.305(d), the maximum civil penalty that may be assessed for a violation of the Federal hazardous material law or a hazardous material regulation is now \$27.500

Congress assigned the responsibility for the enforcement of the Federal hazardous material transportation law to the Secretary of Transportation. Within the Department of Transportation, the Research and Special Programs Administration (RSPA) adopts the Hazardous Materials Regulations (HMR), 49 CFR parts 171 through 178, which govern the transportation of hazardous materials (Hazmat) Although RSPA has some enforcement responsibilities, the responsibility for enforcing the HMR with respect to civil aviation is delegated by the Secretary of Transportation to the FAA. 49 CFR 1 47(k)

The HMR set forth regulations for the transportation of Hazmat A knowing violation of the statute or of the HMR can support the assessment of a civil

penalty between \$250 and \$27,500 A person acts knowingly when the person has actual knowledge of the facts rise to the violation; or a reasonable person acting in the circumstances and exercising reasonable care would have that knowledge 49 U.S.C. 5123(a)(1)(A). The civil penalties authorized under the statute apply to EACH violation of any regulation set forth in the HMR. Moreover, under the statute, each continuing violation of the HMR can constitute a separate violation for each day a violation continues. In section 5124 of the statute, Congress prescribed criminal penalties for a willful violation of the Federal hazardous material transportation law or the HMR, willful violations require evidence of both knowledge of the laws and regulations and intent to violate them

Part 13 of the Federal Aviation Regulations—Investigative and Enforcement Procedures (14 CFR Part 13) governs the procedures applicable to enforcement of the HMR by the FAA Hazmat violations occurring on or after August 2, 1990, may be dismissed by an administrative law judge (ALJ) if a Notice of Proposed Civil Penalty has not been issued within 2 years of the violation, unless good cause for delay has been shown 14 CFR 13 208(d).

Consideration of Statutory Criteria

In determining the sanction to be assessed, penalty criteria set forth in 49 U S.C 5123 must be considered These criteria are the nature, circumstances, extent, and gravity of the violation, the degree of culpability of the violator, any history of past violations, the ability to pay, any effect on the ability to continue to do business, and other matters as justice requires. Some of these considerations already are factored to some extent into the categories in the Hazardous Material Sanction Guidance Matrix The statutory factors are further considered under the weighting analysis that is performed to indicate the amount of civil penalty within the appropriate range, 1 e., at the minimum, moderate, or maximum portion of the sanction range. To comply with the underlying purposes of the Federal hazardous material transportation law and HMR, a sanction should be imposed that is sufficiently deterrent but not excessive

The Hazardous Materials Sanction Guidance is designed to promote better consistency so that similar penalties are imposed in similar cases. The Matrix ranges are intended to reflect the nature. circumstances, extent, and gravity of the case as compared with other types of cases Each case, however, must be evaluated on its own facts A sanction may differ from the Matrix ranges when

the facts and circumstances of a case support either a greater or lesse penalty. When a special agent believes that a penalty should exceed the Matrix ranges, the agent should consult with legal counsel before further processing of the Enforcement Investigative Report (EIR). This consultation is not necessary in the case of a recommended penalty that is less than that provided in the Matrix In either situation, the basis for the decision to go outside the ranges

should be explained in detail.
Violations of Part 175 of the HMR. which establish particular requirements for air carriers and other aircraft operators, are contained in a separate matrix. However, such operators often offer hazardous materials for air transportation, as well as accept and transport them. For this reason, such operators may be liable for violations both as a business entity within the Hazardous Materials Sanction Guidance Matrix, as well as specific air carrier violations

Use of the Sanction Guidance

This guidance provides agency personnel with a systematic way to evaluate a case and arrive at an appropriate penalty, considering all the relevant statutory criteria including any mitigating and aggravating circumstances Statutory considerations have been factored into the various ranges within the Sanction Guidance Matrix. Determination of where a sanction lies within these ranges is aided by a series of weighting questions that probe the various aggravating and mitigating factors that may exist in a

First, the weighting analysis is performed Agency personnel respond to a series of questions to determine the aggregate weight of the case The aggregate weight of the case helps determine the sanction amount of each violation group within the established ranges of the Matrix.

It is important to note that determination of where the sanction lies within the Matrix is not the result of a mathematical computation. Evaluation of the case is based on the totality of the facts and circumstances. Generally, if the answer to a particular question represents a more significant aspect of a case, greater consideration should be given to that answer. For example, violations involving an extremely dangerous substance, even in minute quantities, might warrant a penalty at the maximum end of the range or even a penalty exceeding the Matrix ranges. Under the Sanction Guidance Matrix,

agency personnel determine the category of violator the person falls within (e.g., business entity that regularly offers, accepts, or transports Hazmat) and the offense category (e g., undeclared shipment within Hazmat quantity limitations). The sanction ranges under the various violator categories take into account the relative culpability of the violator Similarly, the offense categories address the nature, circumstances, and gravity of the particular offense. After determining the appropriate categories and intersecting box of the Matrix, agency personnel then determine which subcategories of offenses (e.g., shipping papers) alleged to have been violated. Based on the weighting analysis performed in Section I, an appropriate penalty is assigned for each of the applicable violation groups The penalty amount for each relevant violation group is added together to reach the recommended sanction

Under Section III of the Guidance, the special agent then considers other relevant factors, including evidence of corrective action A recommended sanction may be reduced prior to the issuance of a Notice of Proposed Civil Penalty when there is adequate reliable information concerning the corrective actions taken by a respondent. Corrective actions that justify reduction of the recommended penalty must exceed the minimum legal requirements The special agent also attempts to provide information concerning the alleged violator's size, financial condition, and ability to pay a

recommended sanction.
When an EIR is forwarded to legal counsel for enforcement action, counsel with give appropriate consideration to the recommended sanction. FAA legal counsel will also review the factors analysis, and determinations under the Hazardous Materials Sanction Guidance Any basis for deviating from the recommend sanction is ordinarily explained to, and discussed with, the investigating special agent Final determination of the sanction amount proposed in the Notice of Proposed Civil Penalty is ordinarily a product of joint decisonmaking and approval of the investigating agent and the legal office.

Federal Aviation Administration Hazardous Materials Sanction Guidance

This Sanction Guidance is divided into three sections

- I Case Analysis, II Utilization of the Sanction Guidance Matrix (Matrix), and
 III Consideration of other Statutory Factors.

The Sanction Guidance Matrix is contained in Figure 1 and the Risk Categories are contained in Figure 2

I. Case Analysis (Evaluation of Statutory Assessment Factors)

This section contains a series of questions designed to assist special agents and attorneys in evaluating a particular case. The question review factors involving the nature, circumstances, extent and gravity of the violation, the violator's degree of culpability, and the violator's history of prior violations. Some of these factors are already considered to some extent within the various categories of the Sanction Guidance Matrix. The questions in this section provide additional consideration of the statutory factors and examine the existence of aggravating and mitigating factors in a case

The agent/attorney answers each question in Section I and determines if a relative weight of minimum moderate, or maximum should be assigned based on the response to the question. With the exception of Question A.1., not all questions will apply to a given fact situation. Question A 1., which addresses the nature of the hazardous material(s) involved, is the only question that always receives a 'yes" answer to one of its subquestions and is considered in every case. The aggravating or mitigating factors addressed in the questions only apply to the case when the question receives 'ves'' response Questions receiving a "no" response do not affect the weighting of the case and are not considered. For example, if the violation resulted in harm to persons or property, that may be an aggravating factor in the case. However, the fact that the violation did not result in injury or damage, is not a mitigating factor and should not result in penalty mitigation In many instances, the answers to most or all of the questions will be "no" and the only relevant weighting factor in this section will be the risk category of the material identified in Question A.1.

In determining the final aggregate weight of the case, the responses to each of the questions do not have to be equally considered Determination of whether the overall case should have a minimum, moderate, or maximum weight cannot be determined with mathematical certainty. Generally, if the answer to a question demonstrates that the factor at issue represents a more significant aspect of the case, greater consideration is given to that factor. The final aggregate weight is based on the totality of the facts and circumstances of the case. Once determined, the final aggregate weight is then utilized to arrive at the recommended sanction for

each applicable violation group on the Sanction Guidance Matrix (Fig. 1).

A The Nature, Circumstances, Extent, and Gravity of the Violation

(Factors Concerning the Shipment)

1 What Material(s) Was Offered, Transported, or Accepted for Air Transportation?

(Figure 2 divides hazardous materials of particular classes, divisions, and packing groups into three risk categories: Category A, Category B, and Category C. Find the material(s) at issue in Figure 2 and answer the questions below)

a. Is the material(s) offered, transported, or accepted in Category A? If yes, assign a Maximum weight b. Is the material(s) offered,

transported, or accepted in Category B? If yes, assign a Moderate weight c. Is the material(s) offered, transported, or accepted in Category C? If yes, assign a Minimum weight

Guidance Note: The categories in Figure 2 represent the inherent risk of danger to air transportation posed by the material. If there is more than one type of hazardous material involved in the shipment, answer this question using the hazardous material in the highest risk category.

2. What Quantity of the Material(s) Was Offered, Transported, or Accepted for Air Transportation?

a Did the package(s) exceed the authorized quantity limitations by a significant amount?

If yes, consider a Moderate or Maximum weight depending on the degree to which the limitation was

Guidance Note: The Matrix, discussed in Section III, takes into account the factual situations where the quantity limitations for the material are exceeded. This part of the analysis is intended to determine whether further aggravating circumstances exist where quantity limitations are exceeded by a significant amount. Whether this factor is assigned a moderate or maximum weight will depend on the degree by which the quantity limitation was exceeded.

Example: The quantity limitation for gasoline on a passenger plane is 5 liters per package. If a violator offers 30 liters in a single package on a passenger plane, this may result in a maximum weight for this factor

b Were there multiple packages in the shipment?

If yes, consider a Moderate or Maximum weight, depending on the number of packages and total amount of hazardous material being transported in violation

Guidance Note: A package means a packaging plus its contents. There may be multiple packages in one shipment or

overpack. Multiple packages often represent multiple violations. Under the Sanction Guidance, this fact is considered an aggravating circumstance rather than a direct multiplier of the sanction for each violation Each case, however, must be evaluated on its particular facts. A very large number of packages may result in such an egregious case that the overall weight of the case is so high that a penalty beyond the maximum point in the range is warranted.

An investigation will occasionally reveal several shipments from the same offeror over a period of several days, all of which involve violations of the HMR. These independent acts of offering usually are consolidated into one EIR and addressed in one Note of Proposed Civil Penalty. However, for purposes of determining the appropriate sanction, each separate shipment with a separate air waybill or shipping papers, separate destination, and/or any other evidence establishing it as a separate shipment is ordinarily considered as a separate incident for purposes of applying the sanction guidance analysis. It is suggested that the separate shipments be treated as a individual counts in the EIR and the Notice of Proposed Civil Penalty, with each count having its own sanction derived from application of this guidance. Note, there must be sufficient evidence to support each

3 Did the Shipment Cause Damage or Harm to Persons or Property, or Interfere With Commerce?

If yes, consider a Moderate or Maximum weight.

Guidance Note: The fact that no damage occurred as a result of the shipment is not a mitigating factor However, damage or harm may aggravate the nature, circumstances, extent, and gravity of the violation Depending on the degree of damage caused by the shipment and/or the existence of other aggravating factors, departure from the ranges may be justified

B. Violator's Degree of Culpability
(The Matrix, Figure 1, considers the relative culpability of the violator. This section of the analysis further evaluates the degree of culpability of the violator.)

1 Is the Violator the Manufacturer of the Hazardous Material?

If yes, consider a Maximum weight

Guidance Note: A manufacturer of a hazardous material is expected to have complete knowledge of the nature of the hazardous material and thus, a high degree of culpability will ordinarily be imputed to it.

2. Did Someone Other Than the Violator Prepare the Shipment for Transportation?

If yes, consider a Minimum or Moderate weight.

Guidance Note: Facts supporting an affirmative answer to this question may be cause to mitigate culpability and/or pursue a

separate enforcement action against other responsible parties who handled the shipment A shipper that reships materials received from another person in the same packaging is independently responsible for ensuring the shipment complies with the HMR Nevertheless, the reshipper is generally considered to have a lesser degree of culpability for compliance of the package as received However, if the reshipper unpacks and/or repackages the shipment, the reshipper remains as culpable as the original resimpler remains as cuipaole as the original shipper and generally is not accorded mitigation under this weighting factor. (For purposes of this section, a "reshipper" refers to a person, other than the original offeror, with effort a chiercent of hexagona material. who offers a shipment of hazardous material for transportation)

3 Did the Violator Reasonably Rely on Incorrect Information From Another

If yes, consider a Minimum weight,

Guidance Note: Detrimental or reasonable reliance on another party may be a mitigating factor when considering the violator's degree of culpability. For example, reliance on a inaccurate Material Safety Data Sheet (MSDS) may be mitigating

4. Does the Violator Have a History of Previous HMR Violations?

If ves, consider a Moderate or Maximum weight

Guidance Note: To establish a violation Guidance Note: To establish a violation history, a prior violation must be an actual finding of violation pursuant to a legal enforcement action Special agents should attempt to determine the corporate structure of the violator and whether other husiness entities or names are or have been used by the entity in order to obtain a complete violation history The number and age of violations should be considered Ordinarily findings of violation more than 5 years old carry less weight, unless a continuing pattern of violation exists

C Other Factors

Each case must be evaluated on its particular facts As such, many cases may present unique scenarios and aggravating or mitigating factors that are not routinely seen. If an aggravating or mitigating circumstance exists that is not adequately addressed elsewhere in the sanction guidance, it may be included and assigned a weight under this section. The factor should be clearly identified and explained in the analysis portion of the EIR and carefully scrutinized by legal counsel.

Guidance Note: For example, a shipment of a single package containing severa different hazardous materials may present an aggravating factor. The degree of seriousness of this factor will increase if the hazardous materials are incompatible with each other and, therefore, create an increased risk

Mitigating factors may also exist that have not been adequately considered. For example, a shipment containing a de minimis quantity of material or an amount that would have qualified under the small quantity exception of § 173.4 may present a mitigating factor if as a result there was a reduced risk to safety in transportation

D. Determine the Final Aggregate Weight of the Case

All the responses/weights are evaluated to determine a final aggregate weight of the case (Minimum, Moderate, and Maximum). Questions receiving a "no" response will not be included in this evaluation. To determine the final aggregate weight, the agent/attorney must exercise his/her discretion in light of the statutory factors and knowledge of the particular facts of the case The facts of the particular case will dictate the relative importance of each of the weighting factors in reaching a final aggregate weight. The final aggregate weight should be decided as a result of careful analysis, not a mathematical averaging It is possible that a single weighting factor may outweigh all others. The agent/attorney's analysis should always be explained in this regard

Example: A case involving a hazardous material in the lowest risk category may be evaluated to have a maximum weight because of the large quantity shipped damage resulting from the shipment.

II. Utilize the Matrix (Figure 1)

The sanction ranges under the offeror and offense categories of the Sanction Guidance Matrix reflect the relative culpability of the violator and the nature, circumstances, extent, and gravity of the case Consideration of these particular statutory factors under the Federal hazardous material transportation law is built into the Matrix. Further analysis of the statutory factors is required to determine the appropriate sanction within the ranges established under the Matrix. This analysis is performed in Section 1 After determining the final aggregate weight of the case under the Section 1 analysis, that weight is applied to the appropriate matrix range to identify the recommended sanction amount for each of the relevant violation groups and for the case as a whole Although the Notice of Proposed Civil Penalty may cite numerous violations of a particular part or subpart of the HMR, unless upward departure is justified, a single penalty amount for each violation group is ordinarily used to reach the full sanction

A. Instructions

1. Identify the appropriate category for the type of entity and the nature of the offense involved in the case Refer to the Definitions Section that follows

the Matrix in Figure 1 for guidance. Go to the intersecting box and identify the applicable sanction range for each violation group.

2. Apply the conclusion reached in

the Section I weighting analysis to assign a sanction amount within the minimum, moderate, or maximum portion of the sanction range for each relevant violation group. The recommended civil penalty at this stage is the sum of the sanctions for each of the applicable violation groups. A sanction should not be assessed for a violation group if there have been no violations of that part or subpart of the HMR. The sanction amount for each violation group need not be identical but ordinarily is within the portion of the particular sanction range that

represents the overall weight of the case.

3 Departure from the Matrix ranges— The Matrix is designed to cover the majority of cases involving violations of the HMR The facts and circumstances of a particular case, however, may justify either an upward or downward departure from the Matrix ranges This sanction guidance anticipates and encourages departure from the Matrix ranges when justified A case involving violations in which the nature, circumstances, extent, and gravity of the incident are particularly severe or egregious, may justify upward departure from the Matrix. If the investigating agent believes, based upon the facts of a case, that a penalty should exceed the Matrix ranges, the agent should consult with legal counsel before further processing of the EIR Conversely, the investigating agent may believe that mitigating factors justify a downward departure from the Matrix range Consultation with legal counsel is not necessary in the case of a recommended penalty that is less than that provided in the Matrix In either situation, however, the agent is to provide a detailed explanation of the basis for the

decision to go outside the ranges.

4 Violations of Part 175 regulations, which establish particular requirements for air carriers and other aircraft operators, are contained in a separate matrix However, such operators often offer Hazmat for air transportation as well as accept and transport it As such, the operator may be liable for violations as a business entity within the main Matrix as well as for the specific Part

175 violations

III. Impact of Other Statutory Factors

The Federal hazardous material transportation law also requires consideration of a violator's ability to pay a civil penalty, the impact of the civil penalty on the violator's ability to continue to do business, and other matters that justice requires. Consideration of these factors may result in adjustment of the recommended civil penalty calculated in Section II In situations where the agent or attorney is in possession of mitigating information, such as inability to pay the recommended civil penalty or corrective action taken, reduction of the recommended penalty may be appropriate. Mitigating information should be sufficiently reliable, uncontroverted, and documented in order to support reduction of the recommended civil penalty prior to issuing the Notice of Proposed Civil Penalty

A Ability To Pay/Continue in Business

Historically, the FAA has considered these factors after the issuance of the Notice of Proposed Civil Penalty due to the absence of reliable financial information on which to base a reduction prior to the issuance of a Notice. This Sanction Guidance recommends that the special agent make efforts to obtain reliable information regarding the violator's size and financial condition for review prior to the issuance of a Notice This information will be transmitted to the legal office for consideration. It is recognized that it may not always be possible for the special agent and/or attorney to obtain reliable financial information on a particular respondent. that financial circumstances change and that information may be provided after the issuance of the Notice that may warrant further consideration of a respondent's ability to pay

- 1. The investigating agent will attempt to include financial information as an exhibit in the EIR. It is anticipated that this information, if available, will be obtained from reliable financial data bases Financial documentation should include, but need not be limited to, information concerning the violator's corporate structure, business address, officers, number of employees, and gross revenues.

 2. The investigating agent provides a
- 2. The investigating agent provides a statement or comment with respect to the financial information obtained but ordinarily does not evaluate the financial condition of a respondent with respect to its ability to pay a proposed civil penalty. The investigating agent's statement should encompass areas such as the number of employees, gross revenues, and nature of business of the violator.
- violator.

 3. FAA legal counsel reviews the financial information provided in the EIR and evaluates its sufficiency and relevance to the recommended civil penalty Legal counsel may determine if more current information exists concerning the financial condition of a respondent and if that information substantially differs from the information available at the time of preparation of the EIR If there is a basis for determining that the recommended sanction is mappropriate based upon the financial information provided in the EIR, the recommended sanction is adjusted prior to issuance of the Notice of Proposed Civil Penalty This is a preliminary consideration of a company's ability to pay. As such, pre-Notice adjustment of a recommended civil penalty does not preclude further

consideration of a respondent's financial claims after issuance of the Notice.

4. If legal counsel determines that a respondent qualifies as a small business entity, counsel may consider that status under the Small Business Regulatory Enforcement Fairness Act (SBREFA) with respect to the appropriateness of the recommended civil penalty. A respondent's status as a small business entity may be considered in conjunction with analysis of the statutory factors.

B. Corrective Action

The most common "other matter" that the FAA takes into consideration is corrective action. Corrective action that results in mitigation is remedial action that exceeds the minimum legal requirements. The primary factors in determining the appropriate amount of penalty reduction are the extent and timing of the corrective action. In other words, mitigation is determined on the basis of how much corrective action was taken and how quickly the action was taken. Systemic change intended to prevent future violations should be given greater consideration. Similarly, corrective action that commences upon the violator's first notice of the violation ordinarily is given greater credit than corrective action that commences only after the Notice of Proposed Civil Penalty has been issued.

Mitigation of a recommended civil penalty based upon corrective action should be referenced in the Notice of Proposed Civil Penalty so that the respondent is on notice that credit already has been given for said action.

MATRIX AND DEFINITIONS
[Figure 1]

Offense categories	A. Individual	B. Business entity	C Business entity that uses or han- dles Hazmat in the course of busi- ness	D Business entity that regularly of- fers, accepts, or transports Hazmat
I. Declared Shipment				
1. Shipping Papers	250-500	2501.000	500-2.000	1,000-5,000
2 Labels		250-1.000	500-2,000	1,000-5,000
3 Markings	250-500	250-1,000	500-2,000	1,000-5,000
4. Packaging	250-500	250-1,000	500-2,000	1,000-5,000
5. Training		250-1,000	5002,000	1,000-5,000
6 Emerg Response	250-500	250-1,000	500-2,000	1,000-5,000
7 Release into Environ		2501,000	500-2,000	1,000–5,000
8. Other	250500	250–1,000	500–2,000	1,000–5,000
II. Undeclared Shipment Within Hazmat Quantity Limitations:				
1. Shipping Papers		1,5007,500	2,500-10,000	5,000–12,000
2. Labels	250–1,000	1,500-7,500	2,500–10,000	5,000-12,000
3. Markings		1,500–7,500	2,500-10,000	5,000–12,000
4. Packaging		1,500-7,500	2,500-10,000	5,000–12,000
5. Training		1,500-7,500	2,500-10,000	5,000-12,000
6. Emerg. Response	250-1,000	1,500-7,500	2,500-10,000	5,000-12,000
7. Release into Environ	250-1,000	1,500-7,500	2,500-10,000	5,000–12,000
8. Other	250-1,000	1,500~7,500	l 2,500–10,000	l 5,000–12,000

MATRIX AND DEFINITIONS—Continued [Figure 1]

	[rigare i]			
Offense categories	A. Individual	B. Business entity	C Business entity that uses or han- dles Hazmat in the course of busi- ness	D. Business entity that regularly of- fers, accepts, or transports Hazmat
III. Undeclared Shipment Hazmat Forbidden on, or exceeds qty limits for, Passenger Aircraft 1. Shipping Papers 2. Labels 3. Markings 4. Packaging 5. Training 6. Emerg Response 7. Release into Environ 8. Other IV. Undeclared Shipment Forbidden on, or exceeds qty limits for, All Aircraft 1. Shipping Papers 2. Labels 3. Markings 4. Packaging 5. Training 6. Emerg. Response 7. Release into Environ 8. Other V Intentional or Deliberate Violation	500-5,000 500-5,000 500-5,000 500-5,000 500-5,000 500-5,000 500-27,500 500-27,500 500-27,500 500-27,500 500-27,500 500-27,500 500-27,500 500-27,500 500-27,500	5,000–15,000 5,000–15,000 5,000–15,000 5,000–15,000 5,000–15,000 5,000–15,000 7,000–15,000 7,500–27,500 7,500–27,500 7,500–27,500 7,500–27,500 7,500–27,500 7,500–27,500 7,500–27,500 Consult Legal	7,500–20,000 7,500–20,000 7,500–20,000 7,500–20,000 7,500–20,000 7,500–20,000 7,500–20,000 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 Consult Legal	10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 15,000–27,500 Consult Legal
Air carrier and other aircraft opera	E Group I & II air carriers and other aircraft operators	F. Group III & IV air carriers and other aircraft oper- ators		
Failure to comply with Parts 171, 172, or 173 requirements of Improper acceptance of Hazmat for air transportation (i.e., que shipping papers) See 49 CFR 175.30(a) (1)—(4). Failure to inspect Hazmat shipment properly. See 49 CFR 175 Improper storage/securing of Hazmat aboard aircraft Failure to provide Hazmat training, maintain records of train Hazmat training. Failure to notify FAA properly of incident/discrepancies in Hazr Failure to provide notice to the pilot-in-command.	eantity, labeling, mark 5.30 (b), (c), (d), (e) ling, or meet minimumat shipment	m requirements for	(1) 5,000–27,500 10,000–27,500 10,000–27,500 10,000–27,500 5,000–15,000 5,000–15,000	(1) 2,500–15,000 5,000–15,000 5,000–15,000 1,000–5,000 1,000–5,000 1,000–5,000

¹Use main Matrix

Definitions

(a) Air Carrier and Other Aircraft Operator Groups (I, II, III, IV)—Air carriers and other aircraft operators are divided into two categories for purposes of determining an appropriate sanction. These categories track the air carrier groups established in FAA Order No 2150 3A, Appendix 1, Compliance/ Enforcement Bulletin 92–1, but also includes any operator of an aircraft that is operated "in commerce" as defined in the Federal hazardous materials law, including Part 129 Foreign Air Carriers, Part 125 Operators, and Part 91 Operators. Group I is comprised of air carriers and other aircraft operators with annual operating revenue of \$100.000.000 or more. Group II is comprised of air carriers and other aircraft operators that hold Part 121 certificates or have 50 or more pilots or operate 25 or more aircraft, with annual

operating revenue of less than \$100,000,000. Group III is comprised of air carriers and other aircraft operators that do not meet the criteria for Group II with (1) 6 to 49 pilots, or (2) 6 to 24 aircraft. Group IV is comprised of all other air carriers or aircraft operators not meeting the criteria for Groups I, II, or III

(b) Business Entity—The violator is a business, corporation, partnership, Sub-S Corporation, sole proprietor, association, or any type of commercial entity. An individual who offers a hazmat shipment in air transportation in the course of his/her self-owned business falls into this category. Includes all entities defined under the HMR's definition of "person," (49 CFR 171.8) with the exception of an individual as defined herein.

(c) Business Entity that Regularly Offers, Accepts, or Transports Hazardous Materials in the Course of its Business —A manufacturer or distributor of Hazmat falls into this category A freight forwarder would also fall into this category. The aspect of "regularly" offering covers a business entity that offers Hazmat with some anticipated frequency or purports to do so, e.g., a catalogue company that offers hazardous material to its customers would fall into this category, even though its actual sale or transportation of the Hazmat is infrequent or limited

(d) Business Entity that Uses, Handles Hazmat in the Course of Its Business—
This category encompasses the business that utilizes Hazmat in its business but does not offer it for transportation on a regular basis, as described above For example, a manufacturer of a non-Hazmat product that uses Hazmat in the manufacturing process could fall into this category. It must be established that

the company ordinarily does not offer the Hazmat it utilizes for transportation and the shipment in this instance represents an isolated incident This type of business is held to a higher standard than the business entity that has no regular involvement with Hazmat. The described business entity receives the subject hazardous material in transportation and uses it in its business; thus, it is clearly on notice of the hazardous nature of the material and the regulatory requirements to which the Hazmat is subject.

(e) Declared Shipment-A declared shipment, for purposes of this matrix only, is one that complies with one or more of the communicative requirements of the HMR, i.e., it has markings, labels, and/or partiallycorrect shipping papers A package that has shipping papers that declare the contents as hazardous material but is otherwise not marked or labeled falls into this category Similarly, a properly marked and labeled package that lacks shipping papers also falls into this category. A case falls into this category where there is clear indication that the offeror made some attempt to give notice of the hazardous nature of the shipment.

(f) Forbidden or Exceeds Quantity Limits for Passenger Aircraft—A

shipment falls into this category if the quantity of Hazmat per package exceeds the quantity limitations for passengercarrying aircraft or if the particular hazardous material is forbidden in air transportation on passenger aircraft

(g) Forbidden on or Exceeds Quantity Limits for All Aircraft-A shipment will fall into this category if the quantity of hazardous material per package exceeds the allowable amount for both passenger and cargo aircraft or the Hazmat is absolutely forbidden in air transportation.

(h) Hazmat-A "hazardous material," as defined in 49 CFR 171 8, includes and is interchangeable with the term "dangerous goods," as used in the International Civil Aviation Organization (ICAO) Technical Instructions.

(i) Individual—An individual who offers a shipment of hazardous material in his/her personal capacity without any business purpose or as part of a commercial enterprise on the part of the individual.

(i) Intentional or Deliberate Violation-A shipment falls into this category when there is evidence that the offeror, acceptor, air carrier, or aircraft operator had knowledge of the requirements of the HMR and willfully circumvented or attempted to

circumvent those requirements. For example, an offeror who places a properly marked and labeled Hazmat shipment along with properly completed shipping papers, into an overpack marked as "printed material," has committed an intentional or deliberate violation In this type of case, the investigating agent shall consult with FAA legal counsel and follow agency guidance for potential criminal violations of the HMR.

(k) Undeclared Shipment-This is a shipment that has no indication of its hazardous material contents and/or no indication that the offeror communicated the hazardous nature of the shipment's contents to persons who accept or transport.

(l) Within Hazmat Quantity Limitations-The amount of hazardous material is within the quantity limitations per package as established in the § 172.101 Table (49 CFR 172 101) for the type of aircraft on which the shipment traveled. For example, if the shipment was offered for transportation on a passenger aircraft, the quantity of hazardous material was within the established limit for transportation by passenger aircraft. If the shipment was offered for transportation on a cargo aircraft, the quantity limitations for cargo aircraft apply.

RISK CATEGORIES [Figure 2]

Category "A" (Maximum Weight)

Category "A" materials are materials that when released in the confines of an aircraft can potentially have a catastrophic effect on an aircraft's ability to continue safe flight, resulting in a crash or emergency landing causing injury or death to passengers and flightcrew, as well as persons on the ground

Class 1	Explosives Division 1 1, 1.2, 1 3.
Class 2	Compressed Gases All 2.1, 2.2 with Subsidiary Risk 5.1 and All 2.3 PIH Zones A-D.
Class 3	Flammable Liquids PG I, II, and (PIH).
Class 4	Division 4.1 Flammable Solids PG I, & (Matches).
	Division 4.2 Spontaneously Combustible Materials PG I (Pyrophoric).
	Division 4.3 Dangerous When Wet PG I
Class 5	Division 5.1 Oxidizing Liquids and Solids PG I, II, e.g., "Chemical Oxygen Generators".
	Division 5.2 Organic Peroxides PG II (Type A. B. C. or D)
Class 6	Division 6.1 Poisonous Liquids PG I (PIH).
Class 7	Cargo Aircraft Only Quantities on Passenger Aircraft.
Class 8	Corrosive Material Liquid PG I and (PIH)
Forbidden Materials (See 4	9 CFR 173.21 & ICAO Technical Instructions)

Forbidden Hazmat listed in Dangerous Goods Table 49 CFR 172.101.

Category "B" (Moderate Weight)

The materials listed in Category "B" are materials that may not pose an immediate threat to the safety of a flight, but can cause death or in-iny to persons due to unintended releases in aircraft cabin areas, and potential damage to aircraft structures over a longer period of time due to undiscovered releases on aircraft structural components.

```
Class 1 .....
                                                               Division 1.4, 1.5, 1.6, All Compatibility Groups PG III Flammable Liquids.
                   .....
                                                               PG III Flammable Liquids.
Division 4.1 Flammable Solids PG II, III.
Division 4.2 Spontaneously Combustible Materials PG III.
Division 4.3 Dangerous When Wet PG II, III.
Division 5.1 Oxidizing Liquids or Solids PG III.
Division 5.2 Organic Peroxides (Type E, F, G).
Division 6.1 Poisonous Liquids PG I, II (NON-PIH).
Division 6.2 Infective Substitute
Class 5 .... ..... ..
Class 6 .. ... ... ... ...
                                                              Division 6 2 Infectious Substances
```

RISK CATEGORIES—Continued

[Figure 2]								
	Radioactive Materials, yellow label III, yellow label II, and white label I. Liquids PG II, III Solids PG I, II, III.							
	Category "C" (Minimum Weight)							
The materials listed in Cate	gory "C" are materials that present the least amount of risk to the transportation system.							
	2.2 Nonflammable Gas. Division 6.1 Packing Group III. All other RAM (LSA, LTD QTY, Instruments and Articles).							
Class 9	Miscellaneous Dangerous Goods (ORM–D and Consumer Commodity).							

Note: This guidance is not intended to replace the experienced judgment to a special agent who is convinced, based on the evidence and cts of a case, that the failure of an air carrier, shipper, freight forwarder, or passenger to follow established regulations has posed a risk to

Issued in Washington, DC on April 14, 1999

Jane F. Garvey, Administrator

[FR Doc. 99-9983 Filed 4-20-99; 8:45 am]

BILLING CODE 4910-13-M

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 202, 240, 242 and 249 [Release No. 34-41297; File No. S7-12-98] RIN 3235-AH41

Regulation of Alternative Trading Systems; Technical Amendment

AGENCY: Securities and Exchange Commission

ACTION: Final rule; technical amendment and revised compliance date.

SUMMARY: The Securities and Exchange Commission is modifying the compliance dates for Rule 301(b)(3) and making a technical change to Rule 202.3. These and other rules and rule amendments relate to the regulation of alternative trading systems and exchanges and were published on December 22, 1998 (63 FR 70844). The effective date for the other rules and amendments published in 63 FR 70844 remains April 21, 1999, except for the effective date for §§ 242.301(b)(5)(i)(D) and (E) and §§ 242.301(b)(6)(i)(D) and (E), which remains April 1, 2000. DATES: Effective Date: April 21, 1999 for

amendment to § 202.3.

Compliance Date: Alternative trading

systems must comply with § 242.301 (b) (3) with respect to the 50 securities listed in Schedule A by August 23, 1999; with respect to the securities listed on Schedules A and B by September 28, 1999; with respect to the securities listed on Schedules A, B and C by April 25, 2000; and with respect to all securities by June 20, 2000.

FOR FURTHER INFORMATION CONTACT: Elizabeth King, Senior Special Counsel, at (202) 942–0140, Constance Kiggins,

Special Counsel, at (202) 942-0059, and Kevin Ehrlich, Attorney, at (202) 942–0778, Division of Market Regulation, Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. 20549-1001.

SUPPLEMENTARY INFORMATION:

I. Background

On December 8, 1998, the Securities and Exchange Commission ("Commission") adopted new rules and rule amendments to allow alternative trading systems to choose whether to register as national securities exchang or to register as broker-dealers and comply with additional requirements under Regulation ATS, depending on their activities and trading volume. The effective date for most of these new rules and rule amendments is April 21, 1999. The Commission stated in the adopting release that, prior to April 21 1999, it would publish a list of those securities with respect to which alternative trading systems must comply with Rule 301(b)(3) on April 21, 1999 and those securities with respect to which alternative trading systems must comply with Rule 301(b)(3) on August 30, 1999, Rule 301(b)(3) requires an alternative trading system to provide to a national securities exchange or national securities association, for inclusion in the public quotation system, the prices and sizes of its best priced buy and sell orders, that are displayed to more than one person, in each covered security in which the alternative trading system represents 5% or more of the total trading volume.2

II. Delay of the Compliance Dates for Rule 301(b)(3)

One major alternative trading system has indicated that it will be unable to comply with the requirements of Rule 301 (b) (3) by the original compliance dates without putting the operation of its system at serious risk of failure. The operational failure of a major alternative trading system could interfere with the markets as a whole. Accordingly, the Commission believes it necessa adjust the compliance dates for Rule 301(b)(3) as follows:

August 23, 1999: Compliance with Rule 301 (b)(3) with respect to the 50 Nasdaq securities listed on Schedule A, attached in the appendix.

September 28, 1999: Compliance with Rule 301 (b) (3) for the 50% of Nasdaq securities listed on Schedules A and B, attached in the appendix.

April 25, 2000: Compliance with Rule 301(b)(3) for the 75% of Nasdaq securities listed on Schedules A, B, and C, attached in the appendix.

June 20, 2000: Compliance with Rule 301(b)(3) for all Nasdaq securities.

Schedules A, B, and C were created by ranking all covered securities traded on Nasdaq by their January 1999 volume, and including an equal number of securities from each decile. Some securities that were not traded on Nasdaq in January 1999 may commence trading on Nasdaq subsequently. Alternative trading systems may wait until June 20, 2000 to comply with Rule 301(b)(3) with respect to these securities.

All other compliance dates for the rules and rule amendments adopted last December remain the same. The Commission encourages those alternative trading systems that are able to comply with Rule 301(b)(3) on April 21, 1999 to do so.

¹ Securities Exchange Act Release No. 40760 (Dec. 8. 1998), 63 FR 70844 (Dec. 22, 1998), ² 17 CFR 242.301(b)(3). For purposes of Regulations ATS, a "covered security" includes all exchange-listed, Nasdaq NM securities, and Nasdaq Small Cap securities, other than debt and convertible securities. See Rule 11Ac1-1(a)(6), 17

CFR 240.11Ac1-1(a)(6); Rule 300(g), 17 CFR 242.300(g).

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

APPLIED BIOSYSTEMS 3525 ARDEN ROAD HAYWARD, CA 94545

Air Waybill No.

WARNING

Page 1 of 1 Pages

Shipper's Reference Number 81922147

(optional)

Consignee

Hospital for Sick Children 4000001654 Attn: Receiving 110 Elm St TORONTO ON M5G 1X8 Canada

Applied Biosystems

Two completed and signed copies of this Declaration must be handed to the operator

TRANSPORT DETAILS

This shipment is within the limitations prescribed for: (delete non-applicable)

Airport of Departure:

Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a

forwarder or an IATA cargo agent.

PASSENGER AND AFTER CARGO AIRCRAFT

Airport of Destination:

Shipment type: (delete non-applicable)

NON-RADIOACTIVE

NATURE AND QUANTITY OF DANGEROUS GOODS

Proper shipping name, Class or Division, UN Number or Identification Number, Packing Group (if required), and all other required information.

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (TETRAHYDROFURAN/1-METHYLIMIDAZOLE

SOLUTION), 3, UN2924, II, 8

1,350 mL // 307

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (TETRAHYDROFURAN/ACETIC ANHYDRIDE

SOLUTION), 3, UN2924, II, 8 1,350 mL // 307

FLAMMABLE LIQUID, N.O.S. (TETRAHYDROFURAN/PYRIDINE SOLUTION), 3, UN1993, II

2,250 mL // 307

All packed in one(1) Fibreboard box

Q = 0.6

SAMPLE

Additional Handling Information

Prepared in accordance with ICAO/IATA. CHEMTREC'S 24-hour emergency numbers: N.America 800-424-9300, outside N.America (+1)703-527-3887(reverse charges).

Brandweerinformatiecentrum voor gevaarlijke stoffen IB.I.G.I in Europe(+32)14-584545.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Name/Title of Signatory

Connie Roxas-DG SPECIALIST

Place and Date

HAYWARD, CA 09 December, 2002

Signature

Signature (see warning above) Cuvay

Dangerous Goods Acceptance Checklist – 2002

Fed \(\frac{1}{2}\text{X}\). Express

Fed를조. Dangerous Goods Acceptance Checklist — 2002 ^{Byres}



Die vor de zeigeltstein, ist erzägliche fredfäsisch vour informalis. Steine er Freis in state in solls. Freis er Freis in einemational shipments: a) ensure Service Reference Guide shows.	 16	34 Deckage is marked "USA DOT 74 Type A" or "Type A" and country of origin. Type B and Type C packages must be marked with the design approval number and "Type B" or "Type C" (i.e., "USA9999/B(U)-85 Type B") (10.7.1.3.4, 10.7.1.3.5, 10.7.1.3.6). Type IP peckages must be marked "Type IP-1," "Type IP-2," "Type IP-3," as appropriate (10.7.1.3.3).
"D" designated locations for Express products.	19 🗇 Name and title of signatory, place and date (10.8.3.12; 10.8.3.13)	If Applicable
2 Complies with all applicable government variations (2.9.2)	20	35 \(\text{\tin}\text{\tinte\tinn{\text{\tetx{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}}}}\tinn{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\tint{\text{\text{\text{\text{\text{\text{\text{\texi}\tint{\text{\text{\text{\texi}\tint{\text{\text{\text{\texi}\tint{\text{\texit{\text{\text{\texi}\text{\text{\texi}\tint{\text{\texit{\tetin}\tinint{\texit{\texit{\texit{\texi}\text{\texi}\text{\t
Shipper's Declaration—Note: The tracking No. and the airport/city of departure and destination city may be completed by the shipper or Dangerous Goods	21 21 21-hour emergency response telephone number. No pagers/beepers (USG-12)	See irem 25. 36 ☐ Gross weight of the package is marked if it exceeds 50 kg (110 lb)
Specialist. The declaration must have 2 copies and be printed in English.	If Applicable	(10.7.1.3.1).
3 © Name and address of shipper (10.8.3.1) 4 © Name and address of consignee (10.8.3.2)	22 ① For special form international shipments, the special form approval certificate number in the Authorization column. A copy of the approval must be attached (10.8.3.9.4).	37 — When an overpack is indicated on the declaration: the statement, "Inner packages comply with prescribed specifications" appears on package. (10.7.1.4.2)
Correctivingless (10.55.3.4) Correctivingless whether packed within Passenger or Carpo Aircraft	23 D For Type B package, the design approval number in the Authorization	Labeling
	column. For international shipments only, a copy of the approval document(s), in English, must be attached (10.83.9.4).	38 Two correctly completed radioactive labels on opposite sides (10.7.4.3.1) 39 Two "Cargo Aircraft Only" (Danger) labels on opposite sides, when
7 🗋 Non-radioactive deleted (10.8.3.8)	24 🛘 For Type C package, the design and shipment approval number in the	required (10.7.4.3.1)
Nature & Quantity of Dangerous Goods — This information must be entered	Authorization column. For international shipments only, a copy of the approval document(s), in English, must be attached (10.8.3.9.4, 10.10.3.1)	
in the order given (10.8.3.9).	25 \(\text{\tint{\text{\tint{\text{\tinit}}\text{\texi}\tint{\text{\text{\text{\text{\text{\text{\texi}}\tint{\tinithteta}\text{\text{\text{\texit{\texi}\tint{\text{\texit{\tex{\texi}\text{\texit{\texi}\tint{\texi}\tint{\text{\texi}\text{\ti}\tint{\texit{\texit{\texi}\tint{\texitile}}}}}}}}}}}}}}}}}}}}}}	41 L.J For fissile materials, two correctly completed Criticality Safety Index (CSI) labels on opposite sides, if applicable (10.7.4.3.1)
8 📋 Proper shipping name (10.8.3.9.1, step 1). The following, additional PSN	(USG-04), See item 35.	42 Labels correctly applied and not obscured: irrelevant markings/labels
may be used for US domestic carriage: Radioactive Material NOS, UN 2982;	26 🛘 For Fissile (UN 2918, UN 3324, UN 3325, UN 3326, UN 3327, UN 3328,	
Radioactive Material, Special Form, NOS, UN 2974; Radioactive Material,	UN 3329, UN 3330, UN 3331 or UN 3333), design approval and country	Addistant Commence
Fissile, NOS, UN 2918, Thorium Metal, Pyrophoric, UN 2975; Thorium	approval certificate number in the Authorization column and copies of these	Additional Comments:
Nitrate, Solid, UN 2976; Uranium Metal, Pyrophoric, UN 2979; Uranyl Nitrate	approval documents are also attached (10.8.3.9.4). FedEx Legal/Radiation	
Hexahydrate Solution, UN 2980; Uranyl Nitrate, Solid, UN 2981	Physicist approval document(s) also attached. Plutonium 238, 239, and 241	
9 🗆 Class number 7 (10.8.3.9.1, step 2)	not accepted as any of the fissile UN numbers listed above (FX-03).	
10 🛘 UN number, preceded by prefix "UN" (10.8.3.9.1, step 3)	27 🔲 If overpacked, the words "Overpack Used" (10.8.3.9.2, step 8)	Note: DG Specialist must ensure all discrepancies are indicated before returning
11 🛚 Packing Group number, when applicable, corresponding to subsidiary risk	28 🛘 Shipper's full signature next to amendments or alterations (10.8.1.6)	the shipment.
(10.8.3.9.1, step 4)	Peckeging	
12 Subsidiary risk(s), when applicable, corresponding to subsidiary risk label(s) applied (10,8.3.9.1, step 5)	29 Transportation security seal is intact (10.6.2.1.1.2) (Not required for	For further assistance, please call 1.800.Go.FedEx, (800)463-3339,
	industrial (IP) packages)	then press the number "81", to be connected to the Dangerous
13 — I varne of symbol of radionicalders, fi.e., ii - 192, ivio-93/ (10.8.3.9.2/a), step 6)	30 🖂 Package is in good condition, free of external damage or leakage (9.1.1.3)	Goods Hotline/Hazardous Materials Hotline.
14 🖾 Description of the physical and chemical form, or "Special Form" (if not	Marking	
already included in Proper Shipping Namel (10.8.3.9.2[b], step 6)	31 🔲 Proper shipping name (10.7.1.3.1)	DISTRIBUTION: White Copy - Return with rejected shipment.
15 🗆 Number and type of package (i.e., 1 Type A, 1 Type B, 1 IP1, 1 IP2, 1 IP3)	32 UN number preceded by the prefix "UN" (10.7.1.3.1)	
(10.8.3.9.2, step 7)	$33 \Box$ Name and address of shipper and consignee (10.7.1.3.1)	Effective 01/01/02 Fedex M.2139 02/02 LOGOS 139202 SRC

	Title Cation OF	Cockyt Print Read Commonweal Print Control (901) 224-7200 Cockyt Print Read Commonweal Print Control (901) 224-7200 Cockyt Print Read Cockyt Print Pri	Dry Ice Limits (kilograms) Dry Ice, 9, UN 1845, III		MAIN DECK 680 2631 2132 2268	200 None None	Allowed Allowed	١,	TOTAL 1080 3031 2532 2744	WITH 454 454 454 454 454	cationtype of DG, Use "IC" for AAE/SAXXAWX On 8727 ONLY, up to 1814 kg may be carried with approval of chief plot. Appropriate letter must be attached. It is "C", or "R" where necessary. Balty Caroo Deck compartments 11 through 23 Balty Compartments 4 through 48K	20 21 22 23 A B C D E F	1	NO DG OF LHESE	CI ASSES		0 11 12 13 14 15 16 17 18 18 20 21 22 23 N BELLY	COMPARTMENTS	A LON	DC:10 MO:10	4 000 A 000	A	A A A A A A A A A A A A A A A A A A A	A B C D E F F F F F F F F F B A1 A2 A3 A4 A5 A6 A7 BK GG XA				A B C D E F F1 F2 F3 F4 F5 F6 F7 F8 F9 A1 A2 A3 A4 A5 A6 A7 BC	11 12 13 14 15 16 17 18 19 20 21 22 23				5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 A B C D E F F1 F2 F3 F4 F5 F6 F7 F8 F9 A1 A2 A3 A4 A5 A6 A7 8 8 8 8 8	MAC Can I explories with differing companishing propage are NOT companishie, except C. D. E. and S can be loaded together. Sense companishing proups are always companishe. I AS explorers are always companishe with acts of East of
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(Signature DG Specialist/Agent) l certify that all DGs shown on this form have met all the inspection, integrity, and loading requirements of 49 CFR, IATA/ICAO regulations, and Federal Express Policy

Thave reviewed the information on this form and will have access in flight to all notification forms which accompany DGs on this flight: Feets w.coop. 1201. LOGGS # 101242 SRC

Emp No.

DISTRIBUTION: White -Ceptain, Canary - Retain at ramp (30 days), Pink - Retain with DS Paperwork File (30 Days) (Signature Captain)

Emp No.





CERTIFICATE OF TRAINING





Paul Chuang

has satisfactorily completed

FAA INTERNATIONAL AIR CARRIER ORIENTATION, OPERATION, AIRWORTHINESS, AND DANGEROUS GOODS

given at San Francisco, CA

Dated this 12th day of December, 2002 David Henthorn

Aviation Safety Inspector

San Francisco International Field Office

Aviation Safety Inspector

San Francisco International Field Office

San Francisco International Field Office Manager

Certificate Of Training



PAUL CHUANG



(20 Hours) December $10^{th} - 12^{th}$, 2002

GIVEN AT SAN FRANCISCO INTERNATIONAL FIELD OFFICE (SFO) THE EXPANDED CARGO OPERATIONS SURVEILLANCE (ECOS) HAS SATISFACTORILY COMPLETED

Carmen Di Giacomo, Jr.

J Gary L. Cranford

INTERNATIONAL FIELD OFFICE BURLINGAME, CALIFORNIA

危險物品違規事件量罰表

	T			
違規類別	A:個人	B:商業實體	C:從事危險物	
			品之使用或操	
			作之商業實體	受或運送之商
				業實體
I.有申報之運送				
1.運送文件	250-500	250-1,000	500-2, 000	1, 000-5, 000
2.標籤	250-500	250-1, 000	500-2, 000	1, 000-5, 000
3.標記	250-500	250-1,000	500-2, 000	1, 000-5, 000
4. 包裝	250-500	250-1,000	500-2, 000	1, 000-5, 000
5.訓練		250-1,000	500-2,000	1, 000-5, 000
6.緊急應變	250-500	250-1,000	500-2,000	1, 000-5, 000
7.外洩	250-500	250-1,000	500-2, 000	1, 000-5, 000
8.其他	250-500	250-1,000	500-2,000	1, 000-5, 000
II.未申報之運送	, 其數量在危害	數量限制以下		
1.運送文件	250-1,000	1, 500-7, 500	2,500-10,000	5,000-12,000
2.標籤	250-1, 000	1, 500-7, 500	2, 500-10, 000	5, 000-12, 000
3.標記	250-1,000	1, 500-7, 500	2,500-10,000	5, 000-12, 000
4. 包裝	250-1,000	1, 500-7, 500	2,500-10,000	5, 000-12, 000
5.訓練		1, 500-7, 500	2,500-10,000	5, 000-12, 000
6.緊急應變	250-1, 000	1,500-7,500	2, 500-10, 000	5,000-12,000
7.外洩	250-1, 000	1, 500-7, 500	2, 500-10, 000	5,000-12,000
8.其他	250-1,000	1,500-7,500	2, 500-10, 000	5, 000-12, 000
III.未申報之運i	送,禁止客機運运	送或其數量大於智	客機危害數量限#	刺
1.運送文件	500-5, 000	5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
2.標籤	500-5, 000	5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
3.標記	500-5, 000	5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
4. 包裝	500-5, 000	5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
5.訓練		5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
6.緊急應變	500-5, 000	5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
7.外洩	500-5, 000	5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
8.其他	500-5, 000	5, 000-15, 000	7, 500-20, 000	10, 000-27, 500
IV.未申報之運立	送,禁止客、貨 樓	浅運送或其數量 力	大於客、貨機危害	害數量限制
1.運送文件	500-27, 500	7, 500-27, 500	10, 000-27, 500	15, 000-27, 500
2.標籤	500-27, 500	7, 500-27, 500	10, 000-27, 500	15,000-27,500

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3.標記	500-27, 500	7, 500-27, 500	10, 000-27, 500	15, 000-27, 500
4. 包裝	500-27, 500	7, 500-27, 500	10, 000-27, 500	15, 000-27, 500
5.訓練		7, 500-27, 500	10, 000-27, 500	15, 000-27, 500
6.緊急應變	500-27, 500	7, 500-27, 500	10, 000-27, 500	15, 000-27, 500
7.外洩	500-27, 500	7, 500-27, 500	10, 000-27, 500	15, 000-27, 500
8.其他	500-27, 500	7, 500-27, 500	10, 000-27, 500	15, 000-27, 500
V. 故意或預謀	洽法務人員			
違規				

民航運輸業及其他航空器使用人違規	E. I、II 類民航運	F. III、IV 類民
	輸類及其他航	航運輸類及其
	空器使用人	他航空器使用
		人
違反危險物品法規 Part 171, 172 或 173 有關危險	按上表量罰	按上表量罰
物品供應者		
未依危險物品空運規定收運(例如數量、標籤、	5,000-27,500	2, 500-15, 000
標記、包裝、及運送文件)		
未依規定檢查危險物品託運	10,000-27,500	5,000-15,000
危險物品機上儲存/固定不當	10,000-27,500	5,000-15,000
未依規定提供危險物品訓練、維護訓練紀錄、或	10,000-27,500	5, 000-15, 000
不符最低危險物品訓練需求		
危險物品運送事件/違規未依規定通報	5,000-15,000	1,000-5,000
未依規定通知機長	5,000-15,000	1,000-5,000
Part 175 之其他違規	5,000-15,000	1,000-5,000

說明:

- A、民航運輸業 I、II、III、IV 類:指按 FAA ORDER No. 2150.3A, Appendix 1, Compliance/Enforcement Bulletin 92-1 及按美國聯邦危險物品法規(含 Part 129 外籍民航運輸業、Part 125 航空器使用人、及 Part 91 航空器使用人)之其他從事商業活動航空器使用人。
 - I 類指民航運輸業及其他航空器使用人年營業額 100,000,000 美元或以上者。 II 類指持有 Part 121 許可之民航運輸業或擁有 50 位駕駛員以上或 25 架以上 航空器,其年營業額低於 100,000,000 美元者。
 - III 類指不符合 II 類,其駕駛員人數介於 6 至 49 員,或航空器架數介於 6 至 24 者。
 - IV 類指指其他民航運輸業或航空器使用人,不屬於上述三類者。
- B、商業實體:指商業團體、公司、合夥人、Sub-S 公司、獨立經營人、協會、或其他任何形式之商務實體。以個人身分從事營業性危險物品託運者屬本

類。

- C、持續從事危險物品供應、收受或運送之商業實體:指危險物品製造商或供應商。航空貨運承攬業者亦屬本類。「持續從事」一詞指按預期之頻率或目標,提供危險物品,例如提供危險物品給客戶之型錄公司,即使其實際銷售或運送危險物品之頻率不高或有限者,亦屬本類。
- D、從事危險物品之使用或操作之商業實體:指從事危險物品商務,但不實際執行前述危險物品交運者。例如,生產過程中可能使用危險物品材料,但其產品非屬危險物品之製造業者屬於本類。此類商業實體通常不交運危險物品,涉及危險物品之運送應屬獨立之意外事件。對此類商業實體要求標準較一般未從事危險物品業務之商業實體為嚴格,前者屬危險物品之收受方,並於其商業上使用危險物品,該類商業實體應清楚危險物品之性質及法規之規定。
- E、有申報之託運:指符合危險物品法規規定之運送,即應具備標籤、標記、及 部份文件。包裝件之運送文件已申報內含危險物品,但無標籤或標記者,應 屬本類。同樣,包裝件標籤、標記符合規定,但缺少運送文件者亦屬本類。 託運人已企圖對託運物之危險性予明確表示者,均屬此類。
- F、禁止客機運送或逾客機限制數量:指個別包裝件之危險物品數量逾客機運送 限制或禁止客機運送者。
- G、禁止客、貨機運送或逾客或機限制數量:指個別包裝件之危險物品數量逾客、 貨機限制,或絕對禁止航空運送者。
- H、危險物品(Hazmat):指按 49 CFR 171.8 定義之危險性物質。其名稱與國際民 航組織技術指南所稱之 Dangerous Goods 相同。
- I、個人(Individual):指依其自己之能力託運非營業目的或商務企業自用之危險物品者。
- J:故意或預謀違規:指證據顯示該供應者、收受者、民航運輸業、航空器使用 人具備危險物品法規規定之知識且故意或意圖故意違反該規定者。例如,供 應人將符合危險物品標記、標籤規定之包裝件及完整之運送文件,置入合成 包裝並標示為「印刷物品」者,符合故意或預謀違規。調查本類別違規之檢 查員,應洽詢聯邦法務人員並按調查程序執行危險物品犯罪調查。
- K:未申報之託運:指未標示託運物內含危險物品,或未顯示供應人曾告知收受 人或運送人有關託運物之危險性質者。
- L:低於危險數量限制:指危險物品之總量低於 49 CFR 172.101 所規定,運送該 包裝件航空器型式之個別包裝件數量限制。例如,如託運物使用客機運送, 該危險物品之數量低於前項規定之客機運送限制。如託運物使用貨機運送, 則該危險物品之數量低於貨機運送之限制。

危險等級

A 等級(最大加權)

A 等級危險物品指於密閉之航空器上外洩時,可能劇烈影響航空器之安全飛航能力,造成航空器墜毀或緊急降落,並造成航空器上乘客、組員或地面上人員之傷亡。

_	
第1類	爆炸性物質:Division 1.1, 1.2, 1.3
第2類	壓縮性氣體 2.1、2.2 類並具 5.1 次要危險性者、及 2.3 類吸入
	性毒性 A-D 區
第3類	易燃液體包裝等級為I、II 級及具吸入性毒性
第4類	4.1 類易燃固體包裝等級為 I 級及相同等級
	4.2 類自燃物質包裝等級為 I 級(pyrophoric)
	4.3 類遇水釋放易燃氣體之物質包裝等級為 I 級
第5類	5.1 類液體或固體包裝等級為 I 或 II 級者。例如化學氧氣產生
	器
	5.2 類有機過氧化物包裝等級為 II 級者(A、B、C 或 D 型)
第6類	6.1 類毒性液體包裝等級為 I 級(吸入性毒性)
第7類	限貨機載運數量危險物品使用客機載運
第8類	腐蝕性液體包裝等級為「級者及吸入性毒性

禁止運送物質(詳如 49 CFR 173.21 及 ICAO 技術指南)

49 CFR 172.101 危險物品表上禁運危險物品

B 等級(中等加權)

B 等級危險物品指雖不會造成立即影響飛航安全,但於機艙區域非故意外洩可能 造成人員之死亡或受傷,及於機體結構體長期未發現之外洩物質,造成機體結構 損壞者。

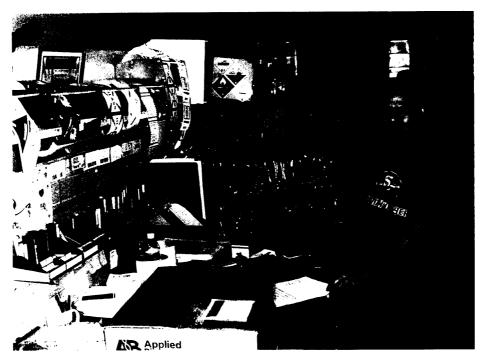
17 W 1	
第1類	Division 1.4,1.5,1.6 之所有相容性組別爆炸性物質
第3類	易燃液體包裝等級為 III 級
第4類	4.1 類易燃固體包裝等級為 II、III 級
	4.2 類自燃物質包裝等級為 III 級
	4.3 類遇水釋放易燃氣體之物質包裝等級為 II、III 級
第5類	5.1 類液體或固體包裝等級為 III 級
	5.2 類有機過氧化物 (E、F、G型)
第6類	6.1 類毒性液體包裝等級為 I、II 級(非吸入性毒性)
	6.2 類傳染性物質
第7類	放射性物質III級黃標籤、II級黃標籤、I級白標籤
第8類	液體包裝等級為 II、III 級,固體包裝等級為 I"II"III 級

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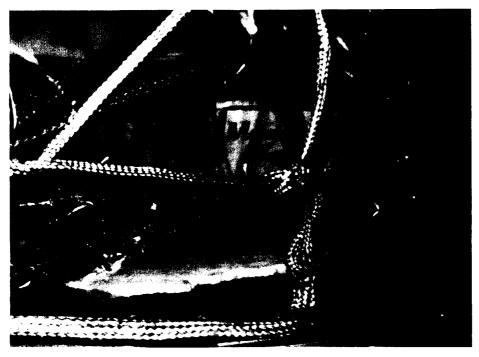
C 等級(最小加權)

C等級危險物品指對運輸系統產生輕度危害之物質

第2類	2.2 非易燃氣體
第6類	6.1 類包裝等級為 III 級
第7類	其他類放射性物質(LSA、LTD QTY、儀器級物件)
第9類	其他類危險物品(ORM-D級消耗物品)



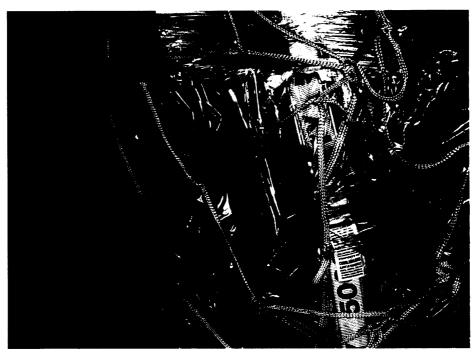
圖一:Applied Biosystems 公司危險物品作業



圖二: B747-400F 貨機危險物品包裝件裝載固定不當



圖三: B747-400F 貨機危險物品包裝件外型變形



圖四: B747-400F 貨機危險物品包裝件重新調整貨網及固定位置