行政院及所屬各機關出國報告
（出國類別：實習）

參加美國聯邦航空學院
檢查員飛行航查班訓練報告書

服務機關：交通部民用航空局
出國人 職稱：約聘航務檢查員
姓名：陳鳴輝
出國地點：美國 奧克拉荷馬市
出國期間：93.8.22—93 8.29
報告日期：93.9.5

系統識別號:C09304060

公 務 出 國 報 告 提 要

頁數: 8　含附件: 是

報告名稱:

參加「美國FAA檢查員飛行航查班訓練」報告書

主辦機關:

交通部民用航空局

聯絡人／電話:

陳碧雲／(02)23496197

出國人員:

陳鳴輝　交通部民用航空局　飛航標準組　約聘人員

出國類別: 實習

出國地區: 美國

出國期間: 民國 93 年 08 月 22 日 -民國 93 年 08 月 29 日

報告日期: 民國 93 年 10 月 11 日

分類號/目: H2／航空　H2／航空

內容摘要: 本次訓練係屬台灣飛行安全基金會為提升飛行航查作業能力、增進飛安，提供本局航空安全檢查員參加美國聯邦航空學院舉辦航空器駕駛艙航路檢查課程，由於經費有限來回飛航越洋航線委請本局以航路查核方式執行。旨在擷取美國等先進國家航務檢查員有關航空器駕駛艙航路檢查作為，以提昇航空器駕駛艙航路檢查之專業能力。

訓練內容共分 Ground Handling、 Registration and Orientation、History En route Inspection 、 Preparation 、 Preflight 、 Security Presentation 、 5-Day Grounding、En route Inspection、The Right Stuff、Ramp Inspection、Project、TCAS、CVR、End of Course Exam，其中包含兩項實習課程，課程講述著重於航路檢查的演進、法規依據、檢查程序及注意事項，並以 DVD 輔助說明，提供學員思考如何將理論付諸應用，學員及講師則提出參與航路檢查之經驗及遭遇之問題在課程中討論。實習課程為駕駛艙/客艙檢查、及模擬機內實習航路檢查；藉由分組實習方式實施航路檢查並應用所學之檢查方式及程序，增進學習效果。

本文電子檔已上傳至出國報告資訊網

目　錄

壹、目的

本次訓練係屬台灣飛行安全基金會為提升飛行航查作業能力、增進飛安，提供本局航空安全檢查員參加美國聯邦航空學院舉辦航空器駕駛艙航路檢查課程，由於經費有限來回飛航越洋航線委請本局以航路查核方式執行。旨在擷取美國等先進國家航務檢查員有關航空器駕駛艙航路檢查作為，以提昇航空器駕駛艙航路檢查之專業能力。

貳、過程

「檢查員飛行航查班」課程，由美國交通部運輸安全學院(Transportation Safety Institute – TSI) 配合美國 FAA 檢查員年度複訓課程，負責規劃、安排。課程時間為 93.8.24-93.8.27，共計 32 小時；受訓地點位於美國奧克拉荷馬市之 Mike Monroney Aeronautical Center。來自 FAA、智利及台灣共 8 名學員參與。訓練內容共分十四項主題進行，其中包含兩項實習課程（如附件一-課程表及參訓學員及 CERTIFY）。

課程講述著重於航路檢查的演進、法規依據、檢查程序及注意事項，並以 DVD 輔助說明，提供學員思考如何將理論付諸應用；且具經驗之學員及講師則提出參與航路檢查之經驗及遭遇之問題在課程中討論。

實習課程為 B-727 實機實習機外 360 度檢查、駕駛艙/客艙檢查、及另在 B-737 模擬機內實習航路檢查（由 OKI-DFW)。藉由分組實習方式實施航路檢查並應用所學之檢查方式及程序，增進學習效果。

參、心得

一、 於 8/22 日實施 CI-356 B-18707 貨機 TPE-ANC-DFW 及 08/28 日(美國時間) CI-007 B-18202 機 LAX-TPE 之駕駛艙航路檢查，依本國檢查員手冊之規範執行各項檢查。中華航空公司之各項航務作業（航機簽放、派遣、任務提示、機上緊急裝備及停機坪加油、裝卸貨物、飛行前後航機檢查等作業）均依公司規範執行。尤以飛行組員間之任務、安全提示及前艙組員間（兩次飛航均為加強組員派遣）之提示，非常詳盡，組員間之 CRM（組員協調合作）及飛航中各階段之檢查執行均持檢查卡實施，並相互檢查。在進場、落地及地面滑行階段，三位前艙組員必須在全

部確認航管指示下，才採取飛航動作，避免違規，確保飛行安全。飛航中之飛行計畫、計畫進場及飛行操作均正常。對執行此兩次任務之前艙組員在專業知識及操作技術上給予肯定，尤其在 CRM 上表現最佳。

另在美國聯邦航空學院受訓前後各執行乙次之駕駛艙航路檢查，在我國與美國檢查員執行駕駛艙航路檢查之目的、程序及要求，幾乎雷同（如附件二，美國駕駛艙航路檢查程序與我國之檢查員手冊內容之駕駛艙航路檢查程序）。依相關法規實施檢查。最大不同之處是美國檢查員之工作單純，而我國的檢查員擔負的其他業務太多，影響執行檢查的品質。

二、 **08/024 日**上午是由 Course Manager Dick Delano 帶領我們介紹 FAA 訓練中心周遭環境、填寫個人資料、造證及上課相關注意事項。

因為本次參訓人員均是飛行員背景，故由另一 Course Manager Loren Farnsworth 為我們介紹此次 FAA 航路檢查複訓重點：

1. 目的：檢查程序的一致化。
2. 相關法源：CFR(Code of Federal Regulation)14(所有有關聯邦運輸的法規)。
3. Ground aircraft 的授權：除領有機務適航簽證人員外，其他人員不得 Ground aircraft。
4. 航路檢查的歷史回顧：從 1926 年有政府的檢查行為開始，其中經過許多抗爭及修改，至 1960 年 8 月始有較完整的法規及程序。

本次教學均採電腦教學，在首日下午的"EN ROUTE INSPECTION PREPARATION"(行前檢查)中，教官用一片 VCD 介紹航路檢查的準備工作及相關注意事項：重點包括

(一) 檢查員的正當性：

1.需有法源支持(CFR 119.59、125.45、135.73)。

2.需有上級的核准(CFR 121.548、125.317、135.75)。

3.需執行於工作時間。

其中教官對聯邦法規的介紹相當詳盡，雖有些條文內容對國內未必適用，惟頗具參考價值。

(二) "ACCESS TO AIRCRAFT"中，除要用專業的態度及技巧執行外，居住的安排是不可接受的(飲食可)。

(三) "INTERNATIONAL EN ROUTE"中所需注意的相關事項：

1. 本身疫苗注射紀錄。

2. 護照相關需求(簽證)。

3. 儘可能與組員在一起。

4. 需與航空公司事先訂位。

5. 執行食的態度需注意事項。

6. 緊急事件通知單位。

三、 08/25 日上午的課程內容主要為"EN ROUTE INSPECTION PRE-FLIGHT"，重點為：

(一) 要以第一時間介紹自己給組員。

(二) 檢查項目包括---- 1.組員證照。

2.機務維修紀錄。

3.相關手冊。

4.航機證照。

5.航機檢查。

(三) 其中 CFR 121.383(C)特別強調---"60 YEAR RULE"。

(四) CFR 121.437(a)規定---PIC 必須有 ATP 及 Instrument Rating。

(五) 機務維修紀錄檢查包括 a.未修妥事項 b.趨勢分析 c.MEL 項目 d.R.I.I e.適航簽放。

(六) 其中對客艙相關檢查亦包含在內，尤其緊急裝備(CFR

121.311、121.31.、121.209、121.309 等)之介紹非常詳盡，其中印象深刻的是，CFR 121.585 (b)(2)中對緊急逃生窗座位旅客年齡特別規定 15 歲以下(視為無法操作緊急逃生窗)不得坐在 Exit row Seats (Emergency Exits)，(目前國內尚無相關法規規定)。

(七) 教官特別強調：無論檢查缺點多寡，如在起飛前已告知相關單位，而問題卻未改善，檢查員本身即不可與航機一起飛(不可成為 Part of Violation)。

下午課程主要介紹" 5 DAY GROUNDING "及"GROUND HANDLING"，

重點為：

(一) 法源：United States Code-Title 49 Chapter 44713 授權檢查員如對航機引擎、螺旋槳及裝備有安全顧慮，可正式函告航空公司作 5 DAY GROUNDING，惟必須確定為下列三種情況下始可執行：

1. 可能導致意外發生。

2. 業者仍欲載客飛行。

3. 可能導致航機受損。

(二) 5 DAY GROUNDING 作業注意事項：

1.檢查員需詳述需 Grounding 原因。

2.如業者仍欲載客飛行，檢查員需採取何適當步驟阻止。

3.確定業者有收到書面文件。

4. 需有回條。

5. 回條需有日期及有效簽名。

(三) "GROUND HANDLING"部分強調地勤加油及貨物裝載注意事項，並播放 SOUTH WEST AIRLINES 的標準地勤加油作業 VCD，內容詳盡且生動活潑，充分代表 SWA 的企業文化。

四、 08/26 日課程重點將參訓人員共分四組，1、2 組人員先行實施 B-727 實機機內外檢查練習，3、4 組人員則作"模擬機實機檢查練習"，一個半小時後互換。在 B-727 實機內、外檢查中，我們瞭解到如何去執行及檢查要項。在**"模擬機實機檢查練習"**：本次是模擬 OKLAHOMA CITY 機場—DALLAS/FORTH WORTH 機場作一次完整的航路檢查，教官先給我們做檢查前 Briefing，本航次所使用者為 B727 飛機(仍有 FE)，在檢查組員證照時，教官會故意拿出過期的體檢證(看我們是否有確實檢查)，且故意不告知緊急逃生須知(看我們是否有注意)，10000 呎以下故意聊天(看我們是否有注意組員需遵守"Sterile Cockpit"規定)，通過轉換空層高度，故意不換 29.92 等等，每組所碰的情況不盡相同，惟於 D Briefing 時大家均會會心一笑，且如有疏忽者亦會學到彼此應注意之事項。因"TCAS"對美國境內有許多舊飛機仍是新系統，所以 FAA 檢查員亦需作 TCAS 系統訓練。

五、 08/27 日課程重點為"Terrain Awareness and Warning Systems"、CVR、FDR 簡介及本次訓練的綜合測驗。

Mr.Delano 按其 37 年的機務資歷，就法規面舉許多實例，如在何種 Class(或多少旅客以上) 所需何種 Warning Systems function、TSO-C151 與 CFR 91.223、121.354 及 135.154 相關法規之關係等。

CVR 部分對其分類：Tape type、Solid state 及 CVR/DFDR combined 僅作概略介紹，惟對法規中對 CVR 的要求、航機配置標準、測試注意事項及是否合乎 MMEL 規定等，均有作詳盡的解說。

綜合測驗因學員與老師課程間均有熱烈的研討及互動，故成績均不錯，此次訓練除了對聯邦法規有更進一步了解外，對航務查核相關注意事項更有全新的學習及認識，非常感謝飛安基金會能舉辦此次訓練，亦建議爾後每年均能舉辦，不但可增進 POI 及航空公司之航查實效，亦可進一步加強與美國 FAA 及國際航查員間之交流。

肆、建議事項

一、 本次赴美受訓，因經費問題，飛行安全基金會為能在有限之經

費下，多派些人去受訓，故要求民航局派訓者，台北-洛杉磯往返實施國際線航路檢查及華航派訓者以公差方式赴美，以節省經費，且飛行安全基金會對此次受訓的規劃費心費力，安排考慮周詳，在此謹代表受訓者對飛行安全基金會的各項作為，致上十二萬分之敬意，並對飛安基金會增進台灣飛安工作之努力，值得大家肯定和支持。

二、 美國交通部運輸學院對學院的安全管理非常周延，受訓人員申請獲准後發給 Temporary Facility Pass 證明（如附件三），始可進入學院；並即刻照相辦理通行證，每日上班進入學院前之道路即分三排（有通行證者使用一、二排，無通行證者進入第三排檢查 Temporary Facility Pass，立即辦理臨時通行證）。無論晴、雨天，檢查人員即在道路旁檢查，在有序、迅速及分辨的原則下，亦不失嚴謹，其作為值得參考。

三、 美國交通部運輸學院為方便來此受訓的學員，與機場之計程車與附近之旅館簽訂合約，不但做最好的服務，而且價錢公道。只要事前預約，即可獲得最佳之服務，且該學院每日均有交通車行駛於各合約旅館及學院間之交通服務，使學員能安心學習。

四、 美國交通部運輸學院於開課的第一節課必為受訓學員（無論是新訓或複訓學員）做學院之設施簡介，尤其是在學員生病或有任何問題需要協助時，有專線電話及人員提供服務。也希望往後舉辦國內、外各種訓練之單位能多思考受訓者之需求及如何提供受訓者最好安全的服務（如附件四 FAA Emergency Readiness Plan）。

五、 該學院舉辦之檢查員飛行航查班，雖為美國 FAA 檢查員之初、複訓設立，此次飛安基金會甄選民航局代表乙員參加此次訓練，更加瞭解如何執行駕駛艙航路檢查及其檢查程序、重點、目的，民航局為何要實施駕駛艙航路檢查之目的，在觀察及評估航空器使用人在空中運輸系統整體作業下之飛航作業，是否遵守民航局及公司之各項規定，且符合飛行安全的要求。飛安是民航局與業者共同的目標，既然目標一次，加上彼此雙方對其工作及作業的瞭解，更能增加信任感及互動，增進飛安，爾後希望飛安基金會或民航局能多舉辦此種訓練。相信對未來的民航發展助益良多。

六、 美國交通部運輸學院對舉辦各種訓練均採取小班制，不但環境良好、師資優良且教材及設備非常完備，上課採用討論及講授併用，再加上影片輔助，易達教學成效之目標，且該學院有實體 B-727 及模擬機配合實習教學，以達學以致用之目的。反觀國內目前無專責之航空人員訓練學校，要提升國內之飛航安全，必先從訓練著手。如何提升航空相關人員之素質，尤其航空事業科技進步非凡，要趕上歐美走向國際舞台，避免龐大投資，國內必先整合航空教育、訓練之學校或場所，使其分工專一，由政府輔導，分別專精某一類航空相關人員之訓練，以提升國內整體航空素養。

伍、附件

附件一： 課程表及參訓學員及 CERTIFY

附件二： 美國駕駛艙航路檢查程序與我國之檢查員手冊內容之駕駛艙航路檢查程序

附件三： Temporary Facility Pass

附件四： FAA Emergency Readiness Plan

附件一

REGULATORY STANDARDS DIVISION

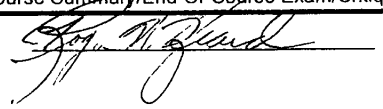
AIRWORTHINESS BRANCH - AMA-250

CLASS SCHEDULE

Aviation Safety Inspector's Cockpit En Route Inspection Course 21406

Course Manager: Dick Delano *Class 04007*

Hours	Subject	Location Bldg 6, room 118	Instructor
Tuesday – August 24, 2004			
0800 - 1400 - 1500	Ground Handling		DeLano
0900	Registration and Orientation		DeLano
0900 - 1000	History En route Inspection		Eagle
1000 - 1200	Preparation		Eagle
1200 - 1230	Lunch		
1230 - 1600	Preparation		Eagle
Wednesday – August 25, 2004			
0800 -1200	Preflight		DeLano
1200 -1230	Lunch		
1230 -1400	Security Presentation		Security (TSA)
1430 -1630	5-Day Grounding		DeLano
Thursday – August 26, 2004			
0800 - 0900	Ground Handling		DeLano
0900 - 1100	En route Inspection		Eagle
1100 - 1200	"The Right Stuff"		Eagle
1200 - 1230	Lunch		
1230 - 1600	Ramp Inspection		Eagle /DeLano
Friday – August 27, 2004			
0800 - 0900	Projects		DeLano
0900 - 1000	TCAS		Hodges
1000 - 1100	CVR		Hodges
1100 - 1200	Course Summary/End-Of-Course Exam/Critique		DeLano

Roger Heard· Branch Manager  Copies: AMA-200 08/23/04

(21406A SCH)

U.S. Department of Transportation

04S0190

INTERNATIONAL

Non-Escort

CHEN, MING-HUEI

Taiwan

08/27/2004

U.S. DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

This is to certify that

MING-HUEI CHEN

has satisfactorily completed the

INSPECTOR COCKPIT EN ROUTE INSPECTION

conducted by the

FAA Academy

AUGUST 27, 2004

Date

William E. Taylor

Superintendent, FAA Academy

Certificate of Training and Official Personnel Record

Date of Issuance: 04-08-27

Course/Exmination Number and Title: 21406 INSPECTOR COCKPIT EN ROUTE INSPECTION

Hours: 32

Requirements for Certificate

PASS = PASS
FAIL = FAIL
WITH = WITHDREW
INCO = INCOMPLETE

Grade: PASS

Course/Examination Description or Remarks

Name/Routing Symbol/Address: CHEN, MING-HUEI

Social Security Number:

Type of Course/Examination: RESIDENT

Region:

Training Orgnizatic: FAA ACADEMY

AC Form 3000-36 (2/98) (nsn 0052-00-564-6005) Supercedes previous editions

Student Co

CERTIFICATE OF TRAINING

U.S. Department of Transportation
Federal Aviation Administration

MING-HUEI CHEN

has satisfactorily completed

INSPECTOR COCKPIT EN ROUTE INSPECTION

awarded by the

FAA ACADEMY

Oklahoma City, Oklahoma

Accredited by the North Central Association of Colleges and Schools

AUGUST 27, 2004
Date of Completion

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Superintendent, FAA Academy

Federal Aviation Administration

Inspector Cockpit En Route Inspection

Course 21406 * Class 04011 * Date: August 24 - 27, 2004

Back Row: Richardo Mendez, David G. Lehman, Bill McNease, Ken Symons, Loren Farnsworth

Front Row: Dick DeLano, Chen Ming-Huei, Carlos Barria, Fernando Bianchi, Kenneth Kerzner

附件二

Things to Remember
EN ROUTE INSPECTIONS

ITEMS REQUIRED:

FAA ID – 110A
FAA Airport ID
Completed form 8430-13
Notebook
Alcohol wipes
Headset
Airport parking sticker/card (as required)
Flashlight

PROCEDURES:

Present 110A and Form 8430-13 to gate agent
Give 8430-13 to crew or gate agent (per co. proc.)
Board aircraft ASAP
Identify yourself to crew using 110A
Check Captain credentials (FO and FE optional)
- Capt.: 60 yrs–First class med/6 mos – ATP, type rating
- FO: Second class med/1 yr – comm., inst., cat., class
- FE: Second class med/1 yr – recip, turprp, turjet (as appr)

Inspect aircraft interior (if no passengers on board)
Inspect aircraft exterior (with crew member if possible)
Inspect aircraft documents and maintenance records
- A/W certificate
- Registration certificate
- Maintenance logbook
- Dispatch/Flight release
- Load manifest
- Checklist, current and appropriate

Rig jumpseat, strap in
Set-up and check headset
Clean O_2 mask with alcohol wipes and check for foreign objects
Check oxygen

FLIGHT PROCEDURES:

Checklist – must use approved current checklist
Sterile flight deck – 0 to 10,000 feet or cruise altitude essential communication only
O_2 – FL250 to FL410, one pilot on O_2 unless quick don masks installed.
FL410 and up, one pilot on O_2
Above FL250, one pilot leaves flight deck, other uses O_2
Altimeter – FL180, set to 29.92

Things to Remember
EN ROUTE INSPECTIONS

REGULATORY INFORMATION

FAR 61.23 – Duration of medical

FAR 91.11 – Interference with crew members
.117 – 250 knots below 10K
.121 – 18K and above altitude set 29.92 (standard)
.123 – PIC cannot deviate from clearance
.203 – A/W and Registration certificates

FAR 107 – Airport security

FAR 121.127(a)(2) – Must have flight manual on board
.301 – Instrument and equipment requirement other pilot wears
.308 – Lavatory fire protection
.309(b)(4) – Compartment contents and inspection placard
.310(b) and (g) – Exit markings
.311(f) and (g) - Shoulder harness TO and landing
.315 – C/P checklist available and use
.333(c)(3) – 25K to 41K one pilot leaves flight deck other pilot wears O_2
.337(b)(9)(iii) – PBE located w/in 3' of fire extinguisher
.359 – Must have CVR
.542 – 0 to 10K sterile flight deck
.543(a) – Crewmember must wear seatbelt
.548 – Access to flight deck
.563 – PIC must make entries in logbook of mechanical irregularities that occurred during flight
.581 – Forward observer's seat
.665 – Must have load manifest
687 – Must have dispatch release
.709 – Must have A/W release after maintenance

5 DAY GROUNDING

US Code Title 49, Chapter 447, Section 44713
Order 8300.10, Volume 3, Chapter 6
Conditions to be met:
Intent for use in air transportation
In unsafe condition
Hazard to persons or property

ADMISSION TO PILOT'S COMPARTMENT:

14 CFR 121.548 ASI Credentials: Admission to ...
Whenever, in performing the duties of conducting an inspection, an inspector of the FAA presents form FAA 110A, "Aviation Safety Inspector's Credential," to the pilot in command of an aircraft operated by a certificate holder, the inspector must be give free and uninterrupted access to the pilot's compartment of that aircraft.

Directions: Click [FILE] then click [PRINT]. Retrieve the copy from the printer.
Cut along the dotted lines. Fold both sides back along the center solid line.
Fold top to bottom.
Trim as necessary and fit inside credential case behind FAA Form 110A

Check List

Conduct a 14 CFR Part 121 Cockpit En Route Inspection

☐ Check	DETERMINE THE NEED FOR THIS INSPECTION
☐ Check	PREPARE FOR THE INSPECTION
☐ Check	Review the office file
☐ Check	Review Integrated Safety Information Subsystem (ISIS) data
☐ Check	Review the Operator's General Operations Manual
☐ Check	Review Operations Specifications
☐ Check	Schedule En Route inspection with operator
☐ Check	Complete FAA Form 8430-13
☐ Check	INSPECT FLIGHT CREW DOCUMENTS
☐ Check	Inspect airman certificates
☐ Check	Knowledges continued
☐ Check	Inspect airman Medical Certificates
☐ Check	Inspect crewmembers required publications
☐ Check	INSPECT AIRCRAFT DOCUMENTS
☐ Check	Inspect aircraft registration
☐ Check	Inspect Aircraft Airworthiness Certificate
☐ Check	Inspect aircraft maintenance record
☐ Check	Aircraft Flight Manual
☐ Check	Inspect dispatch and flight release documents
☐ Check	Inspect maintenance release
☐ Check	INSPECT AIRCRAFT EQUIPMENT
☐ Check	Inspect cockpit voice recorder
	Inspect flight data recorder

- ☐ Check
- ☐ Check INSPECT AIRCRAFT CABIN EQUIPMENT
- ☐ Check INSPECT AIRCRAFT EMERGENCY EQUIPMENT
- ☐ Check OBSERVE AND EVALUATE FLIGHT OPERATIONS
- ☐ Check Interior inspection
- ☐ Check Exterior inspection
- ☐ Check Crewmembers
- ☐ Check Airport/heliport
- ☐ Check ATC/Airspace
- ☐ Check OBSERVE AND EVALUATE OTHER OPERATIONS
- ☐ Check DETERMINE THE RESULTS OF THE INSPECTION
- ☐ Check Advise Principal Operations Inspector if results are unsatisfactory
- ☐ Check Conduct an investigation to determine compliance
- ☐ Check Conduct an enforcement investigation
- ☐ Check DEBRIEF CREWMEMBERS
- ☐ Check DOCUMENT THE INSPECTION
- ☐ Check Schedule a follow-up inspection
- ☐ Check File inspection documents in the office file
- ☐ Check Inform the certificate holding district office of the inspection results
- ☐ Check Validate the Vital Information Subsystem (VIS)
- ☐ Check Close the PTRS record

ENROUTES

OPERATOR:_____

DATE:_____ TO:_____ FROM:_____

8430-13#_____ PTRS#_____ ACFT:_____

FLT#_____ N#_____ NOSE#_____

T/O:_____ GATE:_____ LDG:_____ GATE:_____

CPT_____ DOB:_____

CERT#_____ SS#_____

ADDRESS:_____ LIC TYPE:_____

_____ ISSUE DATE:_____

MEDICAL:_____ DATE:_____

F.O._____ DOB:_____

CERT#_____ SS#_____

ADDRESS:_____ LIC TYPE:_____

_____ ISSUE DATE:_____

MEDICAL:_____ DATE:_____

S.O._____ DOB:_____

CERT#_____ SS#_____

ADDRESS:_____ LIC TYPE:_____

_____ ISSUE DATE:_____

MEDICAL:_____ DATE:_____

A F/A:_____ /_____ /_____

_____ /_____ /_____

REMARKS.

ENROUTES

OPERATOR:_____

DATE:_____ TO:_____ FROM:_____

8430-13#_____ PTRS#_____ ACFT:_____

FLT#_____ N#_____ NOSE#_____

T/O:_____ GATE:_____ LDG:_____ GATE:_____

CPT_____ DOB:_____

CERT#_____ SS#_____

ADDRESS:_____ LIC TYPE:_____

_____ ISSUE DATE:_____

MEDICAL:_____ DATE:_____

F.O._____ DOB:_____

CERT#_____ SS#_____

ADDRESS:_____ LIC TYPE:_____

_____ ISSUE DATE:_____

MEDICAL:_____ DATE:_____

S.O._____ DOB:_____

CERT#_____ SS#_____

ADDRESS:_____ LIC TYPE:_____

_____ ISSUE DATE:_____

MEDICAL:_____ DATE:_____

A F/A:_____ /_____ /_____

_____ /_____ /_____

REMARKS:

駕駛艙航路檢查
COCKPIT EN ROUTE INSPECTION
JOB FUNCTION 5

一般說明

航路檢查之主要目的為提供檢查員觀察及評估一作業許可證持有者在空中運輸系統整體作業環境下的飛航中作業，為民用航空局達成檢查目的及責任之最有效方法之一。此檢查提供民用航空局接觸航空器使用人航空系統內部及外部要項之評估機會。

A. 內部要項：航路檢查時可能觀察之航空器使用人航空系統內部之下列要項：

*飛航組員
*航空器使用人之手冊及檢查表
*最低裝備需求手冊(MELs)及外型差異需求手冊(CDLs)之使用
*航務管制功能(簽派、飛航監控及航機位置標示)
*檢查表、已核准程序及安全操作實施之使用
*組員協調／駕駛艙資源管理
*客艙安全
*航空器情況及保養(servicing)
*訓練計畫之有效性

B. 外部要項：航路檢查時可能觀察之航空器使用人航空系統外部之下列要項：

*航空站／直昇機場地面區域
*停機坪／登機門活動
*航空站施工建築及情況
*航空器移動
*飛航管制及航路設施
*飛航管制及空域程序
*儀器進場程序(IAPs), 標準儀器離場(SIDs), 及標準儀器到場路線(STARs)
*助航設備
*通訊

駕駛艙航路檢查範圍

檢查員應對所有的檢查範圍不論屬航空器使用人內部或外部，均應視為同等重要。航路檢查時，須觀察及評估四個一般範圍，如下列：

*組員
*飛航執行
*航空站／直昇機場
*飛航管制及空域

A. 組員："組員檢查"範圍適用於飛航組員與客艙組員，須藉由直接觀察組員執行其各別之職責及功能以評估組員知識、能力及適職性等各項。所提供之工作輔助列有組員檢查範圍需提醒觀察之項目，這些項目並未包含全部，但代表檢查員在駕駛艙航路檢查應評估之各項目類型。

B. 飛航執行："飛航執行" 檢查範圍為有關航路檢查須觀察之十個特定飛航階段，工作輔助內列有檢查員於這些飛行階段所應評估之項目。這些項目並非包含全部且在某些情況下並不適用(如 '動力後推 'powerback")，但無論如何，檢查員為被鼓勵儘可能對這些項目多予觀察、評估及報告。

註：檢查員如對使用人航空器之特定操作程序不熟悉，對認為應提醒主任航務檢查員注意之任何項目應在檢查報告中加以說明。在檢查後對組員之簡報檢查員必須以良好的判斷力決定對這些項目是否加以評論。

C."航空站／直昇機場" 檢查範圍為有關飛航時須經過之航空站／直昇機場的各種不同要項如跑道、滑行道、停機坪及航空器之地面移動。檢查員在航路檢查時應儘可能對這些項目多予觀察及評估。

D. 飛航管制/空域："飛航管制/空域" 檢查範圍為有關飛航管制及國家或國際間空域系統之各種不同要項，檢查員在航路檢查時應觀察及評估這些要項。從作業之觀點言，這些評估結果將為很有價值之資料來源，一方面可用來加強飛航管制及空域系統之安全，另一方面亦可加強航路及航站設施與程序之效用。

E. 四個一般範圍：雖然這四個一般檢查範圍涵蓋項目很廣，但並非航路檢查只可觀察及評估這些範圍，檢查員也許有機會評估其他範圍，如過境場站作業、飛航管制程序及空服員之職務執行等。這些類型之檢查範圍通常可於飛航開始前、中途停止或飛航結束時加以觀察。

第二節

一般檢查程序

於執行航路檢查前，檢查員必須接受適當執行航路檢查之訓練，並經座艙考試及格，及獲合格督導人員頒發之執行該檢查項目之書面授權

A. 在航路檢查執行之前，檢查員必須熟悉使用人之作業程序及其所使用之設施是相當重要的，檢查員可經由查閱使用人手冊相關部份並向主任航務檢查員或其他熟悉航空器使用人程序及設施之檢查員問問題及從聽取他們的簡報而得以熟悉。檢查員為被鼓勵在檢查報告內對認為有缺失或不安全之程序提出建議，但檢查員在向組員簡報有關特殊核准給該航空器使用人之程序時，必須運用良好的判斷力。

B. 主任航務檢查員須與其被指定之航空器使用人協調以確保每一航空器使用人皆已建立供檢查員安排觀察座位之程序，主任航務檢查員須確保使用人之程序能允許檢查員能自由且不受干擾的取得觀察座位，然而，檢查員還是應儘可能提前通知使用人安排觀察座位事宜。然因檢查員有可能突然須變更原有安排，或有時無法提前通知，故主任航務檢查員須確保航空器使用人之程序為具有彈性且允許在較短的通知期內提供觀察座位之使用。

C. 當可能時，檢查員應計劃一可避免會干擾使用人致使已安排之航線考驗(line check)及初次航路操作經驗（IOE）飛航無法進行之航路檢查方式。若檢查員抵達一飛航班次時，發現航線及 IOE 已在進行，檢查員必須決定對此飛航班次進行航路檢查是否為絕對必要。如為絕對必要，檢查員須通知使用人此航路檢查為絕對必要，並安排一觀察座給檢查員。若航路檢查可重新安排，並仍可滿足檢查目的，檢查員應改安排對另一飛航班

次執行檢查。當航路檢查為絕對必要，而使用人之檢定駕駛員(check airman)坐於前觀察座正在執行一必需之檢查時，檢查員應使用第二觀察座(如有此座位)。在初次航路操作經驗（IOE）飛航，使用人之檢定駕駛員通常應坐於一駕駛員座位而檢查員應坐於前觀察座。當航路檢查之執行對無二個觀察座之航空器為絕對必要時，使用人之檢定駕駛員應坐於駕駛員座位而檢查員應坐於觀察座，在此情況下，非正被檢定之飛航組員必須坐於客艙，或不須伴同飛航。

D. 檢查員應在飛航前一合理時間(約一小時)抵達航空器使用人所指定之作業區或登機門，開始航路檢查。檢查員必須先完成觀察座所需文件以便能被包含於使用人之旅客名單及重量與平衡文件，之後，檢查員須找到飛航組員，向該組員介紹自己，出示民航局飛航查核證，並須通知機長將執行航路檢查。之後，於不影響飛航組員執行勤務之情況下要求飛航組員出示體格檢查及格證、執業證書及檢定證以供檢查及要求飛航組員提供飛航相關文件，如：氣象文件、飛航公告、計畫航路、簽派或簽放文件與其他可顯示航空器適航之相關文件以供檢查。

E. 檢查員在登機前無法遇到或通知機長將進行航路檢查時，在此情況下，當檢查員登機後，應儘快找適當機會向機長介紹自己，出示民航局識別證，通知飛航組員將執行航路檢查。當準備登機時，通常會有一空服員站在客艙主要入口，其主要職務之一為確保只讓已被授權之人員(如持票之旅客、供貨者及被授權之公司人員)進入航空器，因此，檢查員在進入駕駛艙前應準備查核證及佔用觀察座位文件並出示給空服員看；在登上航空器時，應避免妨礙旅客之流動或中斷空服員執行職務，且在此時，檢查員通常有充足的機會去觀察及評估航空器使用人的手提行李程序及登機門管理人或空服員對超大行旅之處理措施。進入駕駛艙後，如之前尚未完成飛航組員之證照檢查，則須要求飛航組員出示體格檢查及格證、執業證書及檢定證以供檢查。當飛航組員完成航空器記錄簿(或同等文件)之審查及簽證後，檢查員應檢查此記錄簿以決定此航空器之適航狀態。

F. 飛航中檢查員應帶耳機，並於“飛航之關鍵階段”應避免分散飛航組員執行其職務之注意力，但檢查員必須警覺並對飛航組員指出任何明顯之危險如交通衝突，且如注意到有可能違反法規或飛航管制許可傾向或發現某飛航組員正違反法規或飛航管制許可，須立即通知機長此狀況。

G. 檢查員於執行航路檢查時應使用航路檢查工作輔助或航路檢查表，這些表單對應觀察及評估之特定範圍列有須提醒之項目，然而，對未列於表上之項目亦可進行評估。

特定檢查程序

A. 於進入駕駛艙內後，檢查員應檢查觀察座位之氧氣面罩及緊急裝備(如適用)，並將耳機插頭插入適當的對講機系統。機長或一被機長指定之飛航組員應給檢查員作一安全簡報，如機長未給檢查員提供此簡報，檢查員應提出要求。檢查員須監聽飛航組員通話使用之所有通訊頻道，以適當評估飛航管制程序、飛航組員對法規之遵守、通訊傳輸清晰度及無線電措詞使用是很重要的。監聽這些通訊頻道亦可確保檢查員不會因不慎而干擾飛航組員通訊，檢查員須持續監聽這些通訊頻道以了解飛航之進行。

B. 檢查員在各飛航階段，須觀察及評估各飛航組員之作業，包含評估其是否遵守已核准之程序，是否適當使用檢查表；並須觀察機長對飛航組員之管理技能、職務指派及整體

執行情形，及所有飛航組員對無干擾駕駛艙（sterile cockpit）程序之遵從情形。在各飛航階段，須觀察及評估之範圍如下：

(1)飛航前：檢查員須判定飛航組員是否已備齊所有需要之飛航資料，包含適當的氣象資料、簽派或簽放文件、飛航計畫、飛航公告、載重平衡資料，最低裝備(MEL)項目是否為依照航空器使用人之最低裝備需求手冊（MEL）及適當之維護程序執行。檢查員亦應觀察飛航組員是否依照航空器使用人之程序執行適當的機外及機內飛行前檢查。

(2)離場前：檢查員應觀察飛航組員完成所有的離場前檢查表、起飛性能計算及必需之飛航管制通訊，飛航組員應使用規定之通信(經由手勢信號或對講機)方式與地面人員通信。通常作後推(pushback）或動力後退 （powerback） 時必須得到適當的飛航管制許可或停機坪管制設施之許可；當滑行時，航空器接收到經由公司無線電傳來之載重平衡資料時，飛航組員應遵照航空器使用人程序由規定之人員執行接收資料，及完成起飛性能計算及另外一人監聽飛航管制頻道。檢查員應觀察下列：

*滑行時完成檢查表項目檢查
*遵守滑行許可
*滑行速度之控制
*等待線之遵守
*飛航組員依照航空器使用人程序執行起飛前簡報

(3)起飛：起飛程序應依使用人被核准之操作及程序文件內所述程序完成，檢查員在飛航起飛階段應觀察及評估下列項目或活動：

*航空器對準跑道中心線
*使用側風控制技術
*所有發動機加速
*起飛動力配置設定
*飛航組員呼叫(callouts)及協調
*遵從起飛速度或各種V速度
*初始仰轉（rotate）速率和角度
*飛航指導儀(flight director)、自動駕駛儀、自動油門之使用
*起落架(gear)及襟翼收起時間安排及空速限制
*遵守飛航管制離場許可或頒布之離場程序

(4)爬升：爬升程序應依航空器使用人經核准之手冊及程序文件內所述程序執行，檢查員在飛航爬升階段應觀察及評估下列項目或活動：

*爬升剖面／區域離場
*空速控制
*航行巡跡／航向控制
*發動機控制
*雷達之使用(如適用)
*自動飛行系統之使用
*加壓程序(如適用)

*無干擾駕駛艙程序之遵守
*情境警覺
*飛航管制許可與指示之遵守
*起飛後檢查表項目檢查
(5)巡航：巡航飛行所用的程序應遵守航空器使用人之程序，檢查員在飛航的巡航階段應觀察及評估下列項目或活動：
*巡航馬赫(馬克)數／空速控制
*航行巡跡及航向控制
*雷達之使用(如適用)
*亂流程序之使用(如適用)
*監控燃油用量並與計劃用量比較
*注意馬赫振動（buffet）及最高性能極限
*與客艙組員之協調
*遵守氧氣需求(如適用)
*警覺
*遵守飛航管制許可及指示
(6)下降：下降所用的程序應遵守航空器使用人之程序，檢查員在飛航的下降階段應觀察及評估下列範圍：
*下降計劃
*通過檢查點(crossing)限制要求
*航行巡跡／航向控制
*雷達之使用(如適用)
*飛航管制許可與指示之遵守
*注意最大空速 Vmo／最大馬克數 Mmo 速度及其他速度之限制
*自動駕駛系統之使用
*艙壓控制(如適用)
*區域／情境警覺（situational awareness）
*高度表之撥定
*簡報(在適當時機)
*與客艙組員之協調
*遵守無干擾駕駛艙程序
*情境警覺
*完成適當檢查表
(7)進場：所選用之進場程序(儀器或目視)應依使用人被核准之操作及程序文件內所述程序完成，檢查員在飛航進場階段應觀察及評估下列範圍：
*進場檢查表項目檢查
*進場簡報(在適當時機)
*飛航管制許可與指示之遵守

*航行巡跡、航向控制及俯仰(pitch)控制
*空速控制，各進場參考速度（Vref）
*飛航指導儀(flight director)、自動駕駛儀、自動油門之使用
*起落架(gear)及襟翼外型配置時間安排
*遵守進場程序
*下沉速率(sink rate)
*在落地外型下之穩定進場(Stablized approach in full landing configuration)
*飛航組員呼叫(call outs)及協調
*轉換至目視飛航(如適用)
(8)落地：落地操作所使用之程序應遵從使用人被核准之操作及程序文件內所述程序完成，檢查員在飛航降落階段應觀察及評估下列範圍：
*落地前檢查表項目檢查
*跑道頭通過高度(TCH)
*航空器中心線之對準
*側風控制技術之使用
*著陸前之下降速率(sink rate to touchdown)
*發動機加速（spool up）考慮.
*著陸及滾行(rollout)
*反推力及減速板(speed brake) 程序
*自動煞車系統之使用(如適用)
*煞車技術
*仍在跑道上時兼顧機艙內之注意力
*落地後檢查表項目檢查
(9)到場前：到場前及停機程序需遵從使用人適當手冊內所述程序完成，檢查員應評估組員完成降落後檢查表項目檢查之情形、地面人員停機及旅客下機程序。
(10)到場：檢查員應觀察及評估飛航組員完成飛航後職務如飛航後檢查、航空器記錄簿填記之情形及飛航記錄文件之完成及處置。
C.於航路檢查時，檢查員應觀察及評估其他檢查區域如飛航管制與空域程序及過境之航空站或直昇機場。
(1)當評估航空站或直昇機場時，檢查員應觀察地面區域之情況如停機坪及登機門、跑道及滑行道。於航路檢查時，檢查員可觀察及評估下列範圍：
*滑行道號誌、標誌、淨空區域(sterile area)及等待線
*停機坪車輛、設備及移動管制
*航空器保養、停機及作業
*障礙物、施工建築物及地面污染(如冰、泥濘、雪、油溢、橡膠積存物)
*下雪時的管制(如適用)
*保安及公共安全
(2)於航路檢查時，檢查員有機會自駕駛艙之有利地點觀察及評估飛航管制作業與空域

程序，檢查員可自駕駛艙觀察及評估下列範圍：

*無線電頻道擁擠、重疊或不通區域

*管制員措詞、清晰度及傳輸速率

*自動化終端資料服務(ATIS)

*全呼叫信號(full call signs)之使用

*跑道同時使用之作業

*航管許可之傳達

*可接受的及安全許可

*航空器隔離標準

*儀器進場程序、離場程序及引接航路 feeder routings 之可接受性

D. 飛航結束後，檢查員須對組員簡報所觀察到的缺失及應採行之改正行動。

若檢查員在飛航中觀察到違規事項並打算建議處罰或打算對組員之執行效能作嚴格評論，則檢查員在簡報中必須告知飛航組員。

報告

評估檢查結果報告以判定改正行動是否需要，並呈報上司後歸入航空器使用人檔案。

工作輔助參照英文版

水上航路檢查
OVERWATER EN ROUTE INSPECTIONS
JOB FUNCTION 5.1

一般說明

本節內容包含檢查員在執行水上航路檢查時，所需使用到的資料、方向和指引。本節中包含了檢查員和飛行組員所需遵守之一般航行法則 (general navigational principles)的背景資料、相關術語的定義以及檢查員觀察飛航組員執行Class II 航行時所需用到的特殊指引。

背景

雖然航行過失已很稀少，但大多數有關於航行的意外事故都是人為過失所造成。在大多數情況中，導航設備仍功能正常，但由於規定的作業程序不適當或未被遵守而使得誤差產生。使用者必須發展計畫以有效訓練長程航行的飛行組員，以確保高水準的駕駛艙規律。

名詞定義

*標準服務容積(Standard Service Volume)：

是指在標準之國際民航組織(ICAO)助航設備(如 VOR, DME, 和 NDB)所提供的導航訊號所涵蓋的空域。

*長程Class II 航行(Long Range Class II Navigation)：

是指在ICAO標準服務容積以外之航行。Class II 航行需要一位合格的飛航領航員並使用天體導航設備(celestial navigation equipment)或是長程電子設備，例如LORAN, INS, DOPPLER, OMEOA, 或 IRS。

*通道(Gateway)：

由 Class I 轉變到長程 Class II 或由 Class I 轉變到長程 Class II 航行時的特殊定位點。在建立通道之後，ICAO Class I 助航設備才能建立一準確的定位。

*最低航行性能標準空域(MNPS Airspace)

最低航行性能標準(MNPS)空域是位於ICAO標準服務容積以外的空域。在此空域中航跡遵循(adhering to tracks)之最低標準是依照國際協定之要求。這些標準包括了平行航跡之間的最低間隔。在MNPS空域中作業必須要有特殊的訓練、導航設備、並要遵守Class II 航行及其他某些特殊程序。

*推測航行(Dead Reckoning)：

主要是藉由計算已知的或是估計的風的資料來預測漂移(drift)、對地速度、航跡和航路時間(time enroute)。

*定位點(Fix)：

為一航空器在某個時間之位置測量，可以由標準助航設備所提供的距離和方位來定位，或由電子式長程導航設備來定位，或由天體觀察來定位。

*路標點(Waypoint)：

在空間中用來進行導航、飛航計畫和航管報告的一個點。路標點和檢查點不同之處在於它並不需是一個明顯可分辨的陸標。

*交叉檢查(Cross Checking)：

交叉檢查是一種查證行動。交叉檢查會比較一組測試資料和一組主資料(master data)以查出順序或內容的誤差。

*航跡訊息(Track Messages)：

在北大西洋航跡系統中，在上半天時，由東向西的空中交通流量龐大，而在下半天時，則為由西向東。結果，在上半天時大多數可取得的航跡是由東向西，而在下半天時，可取得的航跡則是由西向東，被指定的航跡也會向北和南移動以利用或避開風向。往東和往西飛航時可得到的航跡約每 12 小時改變一次。飛航管制(ATC)選擇航跡座標，並在〝航跡訊息〞上頒佈。航跡訊息提供了航跡座標、可取得的飛航空層和閘道。在有組織的航跡系統中作業的航空器必須在駕駛艙中保有一份當時的航跡電報副本。

飛航計畫

有關於航行的所有資料必須記錄在主飛航計畫中，檢查員在評估這個範圍時應使用下列指引：

A. 電腦化飛航計畫：即使大部分的使用者使用電腦化飛航計畫，所有的飛航計畫仍須小心的檢查以確保其精確性。飛航計畫上的航路必須和航行圖以及航跡訊息進行交叉檢查。此外，飛航計畫也需明瞭易讀。

B. 路標點編號：檢查飛航計畫之後，應將路標點編號，有許多自動導航系統只能接受 9 個路標點，路標點可依順序編號下去，由 1 開始直到 9，然後第 10 個路標點可以編號為 1，第 11 個則為 2，如此下去。至於其它導航系統，例如飛航管理系統(FMS)則可接受 100 個或更多路標點。在這種情況下，路標點可以繼續累進編號下去。如果使用了超過一種以上的導航設備時(例如 INS 和 FMS)，路標點之編號必須同時能符合這兩種設備。在此例中，可行的方法是在 FMS 中前 9 個路標點編號為 11 到 19，而第 2 組的路標點則由 21 到 29，依此類推。

C. 圖表：計畫的航路必須畫在適當比例(1 英吋比 120 海哩)的圖表上。所有在圖表上的路標點必須和主飛航計畫交叉檢查。

D. 飛航公告和駕駛員報告(NOTAMs and PIREPs)

必須取得並檢查目前的飛航公告以確保所需的電台有提供 OMEGA 和 LORAN 作業。駕駛員報告也必須要經過檢查以確保實際風的資料和預報相同。

駕駛艙設置(COCKPIT SETUP)

駕駛艙設置是從飛航組員依照飛航手冊程序，開啟導航電腦開始，檢查員應在駕駛艙設置(設定)期間的觀察飛航組員並且注意下列事項：

A. 軟體和修正狀態：在輸入目的初始位置和路標點之前，飛航組員應確認他們所使用的程序適合此電腦中的軟體。飛航管理系統(FMS)資料庫輸入電腦的日期應被檢查過以確保資料庫是最新的。

B. 目前位置和路標點之輸入：應有一位飛航組員找出並輸入目前初始位置到導航電腦中，而在主飛航計畫中必須記錄下這項動作。飛航組員在輸入程序執行後拷貝其顯示出來的座標，並且在其上標記〝目前初始位置〞，為一可被接受之記錄方法。至

於可被接受之路標點輸入記錄方法，則可以採用在主要飛航計畫上圈出這些路標點之方式進行。

C. 交叉檢查初始設置：第二位飛航組員必須獨立找出目前初始位置，並且查證所有的導航電腦都有被正確設置。此位飛航組員須以下列步驟來查證每個路標點的精確性。

(1)飛航組員必須將查證記錄在主飛航計畫上，飛航組員在目前初始位置和每檢查過的路標點之間畫一斜線以表示已查證，為一可被接受之查證記錄方法。

(2)當使用遠端功能時，因為遠端電腦可能收到和傳送時不相同的資料，而使資料流失，因而飛航組員必須獨立檢查每一部電腦中的目前位置和路標點。

D. 區域距離檢查：路標點被輸入並經由另一飛航組員查證過後，飛航組員必須比較電腦和飛航計畫內所顯示的航跡方位和區域距離(Zone distance，ZD)。航跡方位或距離若相差超過â2 則應要加以調查。

E. 起飛前檢查：有些導航設備的製造商建議執行起飛前檢查。例如，製造商可能建議在飛航組員把慣性導航系統上的〝NAV Mode〞選擇器轉到〝NAV〞後，飛航組員在移動航空器之前應檢查對地速度，如果顯示出有些速度，則可能表示系統故障。在地面作業時亦用來導航的系統，例如 INS 和 OMEGA，則建議執行滑行檢查，目前位置和對地速度應被交叉檢查以確認作業正確。檢查員應觀察飛航組員執行使用者程序中所要求的檢查。

通道程序(GATEWAY PROCEDURE)

除非導航電腦的功能已被查證為正確的，否則不可超出通道飛航。檢查員應觀察飛航組員執行通道檢查並應確認飛航組員有遵照使用者的程序執行。下列是一組典型的使用者程序以及一些檢查員評估這種程序的指引：

A. 剛越過通道之後，一位飛航組員應記錄每一部導航電腦的時間和目前位置。飛航組員應使用電腦上的保持功能(hold feature)以凍結目前的位置顯示。這個位置必須和已知的通道位置比較，後並與每一部電腦已建立的偏差值比較。這項通道檢查可以檢查出在位置資料中可能會發生的誤差，如需要也可以提供更新資料的機會，並藉此建立一最精確的電腦。

B. 通常，到達下一個路標點的時間和距離會顯示在正在提供駕駛操縱信號的電腦上，這個電腦可以設定為使用三重混合(triple mix,如有這項功能)。第二部電腦應設定為顯示交叉航跡(cross track；XTK)和航跡角誤差(track angle error ;TKE)。使用者的三重混合程序應依據製造者的建議來製訂。

C. 飛航組員應記錄實際風的資料以便和飛航前計畫比較，若萬一必須折返飛航時亦可使用這些資料。

路標點轉換程序(WAYPOINT CHANGOVER PROCEDURES)

當執行水上航路檢查時，檢查員應確保使用者的路標點轉換程序包含下列幾點：

A. 往內(Inbonnd)：當接進一個路標點時，飛航組員應將此路標點之實際坐標和飛航計畫交叉檢查。

B. 往外(Outbound)：在通過一個路標點後，一位飛行組員應確認每一部電腦都已轉換

到下一個航段而且航空器正沿著所希望的航跡飛行。路標點的通過須由一位飛航組員記錄在主飛航計畫中，由飛行組員在通過路標點編號周圍的圓圈上畫上第二條斜線為一可接受之記錄方法。飛航組員必須記錄通過路標點的時間以及機上的燃油量，同時估計下一個路標點的預計到場時間(ETA)以為飛航管制報告。

C. 畫航線：畫圖程序可減少航線偏差的事故，當只靠長程導航電腦來航行時，飛航組員應使用這個程序。在通過每一路標點大約 10 分鐘後，一位飛航組員應記錄下目前的位置並且把位置畫在圖表上，畫的位置應落在航跡線上。

到場後程序(AFTER ARRIVAL PROCEDURES)

到場後，檢查員應確認有一位飛行組員計算出實際位置與每一部電腦上所顯示的目前位置之間的距離。飛航組員應依照使用者的程序記錄這些觀察結果。

航行意外事故應變程序(NAVIGATION CONTINGENCY PROCEDURES)

檢查員必須確認使用者的訓練計畫、手冊和檢查航空人員計畫中包含了當航行系統部分和完全失效時的程序。特殊的程序需依使用設備之類型和作業執行的區域而有所不同，檢查員應明瞭如這些程序應用不當將可能導致和另一架航空器碰撞。當依據目前的航管許可無法再繼續飛航時，飛航組員需和航管塔台聯絡，為這些程序中所固有的要求，這其中包括了航空器偏離航線或無法維持指定高度的情況。在緊急狀況下，此程序資料內給飛航組員的指令需能立即被應用，飛航組員應不需參考其他飛航文件資料就知道他首先應採取之緊急動作。飛航組員必須知道這些程序發佈在何處且在需要時能快速地找到。

航空器性能

檢查員應知道延展水上作業時，當一具或兩具引擎失效時之效能要求。在執行延展水上作業時，檢查員應評估使用者用何種方法來符合這些規則，以及飛航組員對這些程序的明瞭。在評估引擎失效程序時，檢查員也應考慮下列的指引：

A. ETPs：使用者經常使用等時點(Equal Time Point ;ETP)計算以顯示符合引擎失效時之效能要求。當檢查員評估到這個範圍時應考慮下列事項：

(1)適職性：飛航組員經常會被指定負責計算 ETPs，飛航組員必須對此非常熟練。不論是否由飛航組員來進行這些計算，他們都必須熟悉這些計算的情況以及意義。

(2)備用機場的使用：檢查員可以使用中途備用機場並且計算多個 ETPs 以證明其符合引擎失效時之效能規則。例如，由舊金山飛到東京時，使用者應指定西雅圖、安哥拉治和 Adak 作為中途備用機場，每一個備用機場都必須被列在飛航簽放文件上。飛航組員必須知道當一具引擎失效時他們須遵循的程序。

B. 燃油傾倒或漂泄(Fuel Dumping and Driftdown)：

引擎失效程序通常要求傾倒或漂泄或是兩者都要。飛航組員必須知道如何做這些決定。通常，航空器重量和高度資料是以表格形式表示出；因此，飛航組員必須有能力解釋這些表格。

飛航簽放規則

檢查員應十分熟悉在延展水上作業下的飛航機簽放規則。檢查員應確認使用人和飛航組

員皆有遵守這些規則。這些規則如下：

A. 最低天氣限度：檢查員應確定飛航組員對於目的地和備用機場的最低天氣要求十分熟悉，在飛航途中，若目的地或備用機場的天氣低於最低限度，飛航組員應知道其必須遵守的程序。

B. 特殊作業

因為作業規範(Operations Specifications ; Op Specs)中對於特殊作業有一些限制，檢查員應對使用特別備用油的作業或已計畫之簽放作業特別加以注意。

報告

評估檢查結果報告以判定改正行動是否需要，並呈報上司後歸使用人檔案。

航線考驗
LINE CHECK INSPECTIONS
JOB FUNCTION 5.2

一般說明

此章節包含提供給檢查員執行航線考驗時所須的方向和指引。組成航線考驗(line check)的主要項目為與駕駛艙航路檢查(cockpit enroute inspection) 所組成的要素相同。

航線考驗特定之實施及程序

使用人應負責管理初期及定期重覆之航線考驗，但在某些情況下，特別是當使用人沒有被授權擁有自己的檢查航空人員(check airman)時，民航局檢查員可管理航線考驗。

A. 檢查員資格：檢查員必須符合所執行航線考驗之航空器種類和等級的資格。如該航空器為經類型等級檢定，檢查員必須持有此類型等級資格以執行初始的、過渡期的或升等的航線考驗。針對定期重複的檢查，檢查員應符合該種類和等級的資格。

B. 檢查員之準備：檢查員準備執行航線考驗時應完成下列步驟：

(1)熟悉：檢查員在執行航線考驗之前應熟悉使用人之程序，使用人的手冊和作業規範為此資料的來源。

(2)時間：檢查員應計畫抵達時有足夠時間去完成必需的觀察座程序，與飛航組員見面，檢查航空人員執業證書、檢定證和體格及格證，並觀察其飛航前職務。當執行這些檢查時，檢查員應使用駕駛艙航路檢查工作輔助。在作業區域內，於任何可能之時間，檢查員應開始一航線考驗。

C. 航線考驗的航線和期間

檢查員至少應觀察一段飛航，須包含起飛和降落。飛航必須飛越使用人所經營之一典型航路，並且必須讓檢查員能夠觀察機長執行一有收費飛航之職務和責任。

註：機長可飛行兩段飛航或在第二段飛航時僅執行不飛行駕駛員的職務而由副駕駛員執行駕駛員的飛行職務。

D. 檢查後之簡報

飛航完成後，檢查員應與機長簡報。檢查員應對任何認為有缺失或不安全的程序給予意見，然而在對組員簡報或評論民航局已核准給該使用人之程序，檢查員必須使用適當的判斷力。

E. 文件填記

檢查員應記錄已完成的航線考驗結果於該公司之檢查表格上，並且以檢查航空人員之名義簽名。

工作輔助之使用

駕駛艙航路檢查工作輔助列有應觀察和評估的特定範圍及其項目。

報告

評估檢查結果報告以判定是否需要改正行動，並呈報上司後歸使用人檔案。

航空器駕駛艙航路檢查工作輔助表

日期：	航空器	班次：	登記證號碼		製造廠：	型別 ／ 系列：
機長姓名：	證書號碼：	基地	起站：	迄站：	結果：	

U = 不能接受； P = 皆在可能； I =資料； E = 超出

組員											
	知識										
	能力／適職										
	資格／有效性										
	證書／等級										
	簡報										
	手冊有效性										
	手冊易取用性										
	組員數足夠										
	組員協調										
	作業準備										
	所需設備										
	其他意見										
飛航執行											
	飛航前										
	*飛航計畫										
	*氣象										
	*飛航公告										
	*航空器檢查										
	*起飛資料										
	*載重資料										
	*簽派／發放										
	*駕駛艙設置(setup)										
	離場前										
	*地面組員										
	*倒車										
	*起動發動機										
	滑行／起飛										
	*Powerback										
	*滑行速度										
	*程序										
	*跑道對準										
	*側風控制										
	*給引擎動力										
	*動力設定										
	*呼叫										
	*起飛速度										
	*旋轉										
	*機輪／襟翼速度										
	標準儀器離場										
	*離場區域										
	爬升										
	*航向／速度控制										
	*動力設定										
	*程序										
	巡航										
	*速度控制										
	*導航										
	*程序										
	*高／低 Buffet										
	*氧氣要求										
	*燃油管理										
	下降										
	*計畫										
	*速度控制										
	*導航										
	*加壓										
	*高度呼叫										
	標準儀器進場										
	進場										
	*速度控制										
	*機輪／襟翼速度										
	*穩定										
	*程序										
	標準儀器進場程序										
	降落／滑行										
	*跑道對準										
	*側風控制										
	*速度控制										
	*下降速度										
	*著地／展行										
	*動力反轉／停速										
	*煞車										
	*停機										
	擊成										
	調配										
	其他意見										
遵守											
	法規										
	程序										
	*高度呼叫										
	*雷達使用										
	有足夠組員										
	檢查表使用										
	MEL／CDL 使用										
	嚴峻駕駛艙規則										
	航空器限制										
	手提行旅										
	客艙安全										
	公司之指令										
	航管許可										
	旅客處理										
	航空器缺失										
	重量與平衡										
	作業規範										
	危險物品										
	其他意見										
航空站／直昇機場											
	安全保護										
	公共安全										
	跑道										
	滑行道										
	停機坪 ／ 登機門										
	禁入區域										
	標誌										
	號誌										
	車輛／設備										
	障礙物										
	建築物										
	污染物／外物損害										
	燈光										
	進場設施										
	助航設施										
	下雪及冰之管制										
	其他意見										
航管／空域											
	航管許可										
	*許可傳達										
	*航站設施										
	*航路設施										
	*管制員指示										
	自動化終端資料服務										
	標準儀器離場／標準儀器到場路線										
	程序										
	*跑道同時使用										
	*雷達誘導										
	其他意見										

附件三

AUG 16 2004

Temporary Facility Pass

For International Participants

NAME: Ming-Huei Chen	**COUNTRY: Taiwan**
AGREEMENT NUMBER: NT4217TW8 (Appendix 156)	**DATES: August 24-27, 2004**
COURSE: 21406, Inspector Cockpit En Route Inspection	

To: Security Office, Federal Aviation Administration Training Academy
Please admit the above stated participant into the Mike Monroney Aeronautical Center.

To: The Participant
In order to board the FAA Academy Shuttle, you must display this pass and your passport.

Please present this pass to the security officer at the front gate of the Mike Monroney Aeronautical Center in order to obtain entry. If you are not in possession of this pass, you may be refused entry into the complex. You must report at 7:45 a.m. on August 24, 2004. You will be issued an official pass upon registration with Ms. Glenda Wilson-Calhoun, International Liaison Specialist, International Training Services Center, Air Navigation Facility No. 1 Building, Room 220, telephone (405) 954-3508. If you have any further questions, please contact Ms. Wilson-Calhoun directly.

Sincerely,

Raymond K. Smith
Division Manager, AIA-400
Office of International Aviation

U.S. Department of Transportation
Federal Aviation Administration

Office of the International Aviation

800 Independence Ave., S.W.
Washington, D.C. 20591

AUG 16 2004

VIA FACSIMILE

To: **Sayoko Koto**

Fax: 9-011-81-3-3582-5974

Subject: **Temporary Facility Pass**
Unclassified: AIA-400/04/4217

The passes must be presented to the security officer upon arriving at the academy or entering the FAA Academy Shuttle. If the participant is not in possession of the pass and passport, he will be refused to board the FAA Shuttle and entry into the training facility.

IN ORDER TO OBTAIN AN EXTENDED STAY VISA, PLEASE BRING A COPY OF THE AGREEMENT WITH YOU AND SHOW IT TO AN IMMIGRATION OFFICER AT YOUR FIRST U.S. DESTINATION AIRPORT.

Should you have any questions that require further assistance, please contact Eunsoon Welsh, International Training Specialist at facsimile 202-267-7172,or e-mail 9-AWA-AIA-INTL-TRAINING@faa.gov. The FAA looks forward to your participation in our training program.

Sincerely,

for Raymond K. Smith
Division Manager, AIA-400
Office of International Aviation

Post-it® Fax Note 7671	Date 8/17	# of pages ▶ 2
To Ms. Rosa Mar	From Sayoko Koto	
Co./Dept. FSF	Co. FAA - Tokyo	
Phone # 03-3-3577-5801	Phone #	
Fax # 03-3-3577-5934	Fax #	

附件四

FAA ACADEMY EMERGENCY READINESS PLAN

April 2002

TABLE OF CONTENTS

PURPOSE

Definition To assign responsibilities and establish operating procedures during certain emergency situations.

SCOPE

Definition This plan implements Order 1900.12B, Aeronautical Center Emergency Operations Plan. It addresses emergencies including imminent attack, severe weather, fire alert, bomb alert, civil disturbances, violence in the work place, prison escapee, acts of terrorism, chemical and biological agents, and other hazardous situations.

GENERAL RESPONSIBILITIES

FAA Academy Responsibilities The emergency operations responsibilities described below are assigned to the Academy Superintendent and other Aeronautical Center Program Directors:

- Continue to perform assigned functions unless the functions are modified, suspended, superseded, or continued performance of assigned functions is rendered impossible by conditions during the emergency or disaster situation.
- Coordinate with other organizations in the implementation of protective measures for personnel.
- Maintain emergency operations plans including a shelter plan for use in the event of a disaster. Review and update plans by January 31st of each year and provide copies to the Emergency Operations Specialist (AMP-10) and other affected organizations, and distribute within the individual organization, as needed. The plans shall address:
    1. Procedures for evacuating personnel to underground shelters or to structurally sound above-ground shelters available when in off-site locations.
    2. The adequacy of basic first aid capability.
    3. The maintenance of organizational first aid kits.
- Post evacuation and shelter plans in the organization and instruct employees in the procedures to be followed. Plans should be tailored to meet specific security, technological, or natural threats such as bomb threats, attack, chemical and gas leaks, fire, or catastrophic weather.
- Maintain and provide to the Operations Center (AMP-10), updated listings of buildings occupied by organizational personnel during other than normal duty hours. Provide a telephone number for emergency notification in buildings where the Aeronautical Center paging system does not reach.
- Provide the Emergency Operations Specialist with updated Operational Lines of Succession by January 31 of each year and

as changes occur.

- Identify vital records through the annual review conducted by the Aeronautical Center Management Officer (AMC-8). Obtain suitable storage areas for protection of the records.
- Assure all new employees complete the correspondence study training course, Introduction to Emergency Readiness, Course 14017.
- Identify one designee and an alternate to serve as an Emergency Readiness Officer (ERO).

Academy-Specific Responsibilities

- Maintain plans to provide for the safety and protection of staff and students, provide copies of procedures to students, and assist recalled students in obtaining transportation.
- Provide flight crews, if needed, for dispersal of FAA aircraft during increased readiness levels.

Instructors & Managers

Instructors and managers shall:

- Ensure each class or new employee receives an emergency procedures briefing as a part of course or new employee orientation. Briefing shall include:
  - ⇒ Recognition of warning signals.
  - ⇒ Evacuation routes, shelter areas.
- Instructors shall ensure that each student who requests a copy of the Student Services Handbook shall receive one. All students shall be provided the URL of the online handbook: http://www.academy.jccbi.gov/ama400/ama100/handbook/hndbk.htm.
- Managers shall ensure new employees know the location of, and familiarize themselves with, all necessary emergency readiness plan materials.
- In any actual emergency or drill, managers shall make a reasonable effort to verify that all personnel in their area(s) have evacuated the building or moved to the appropriate shelter area as the situation warrants. Once assembled in designated evacuation area, manager/instructor should account for all those for whom he/she is responsible.

All Employees

All employees shall:

- At least annually, review all AMA emergency readiness plans related to the entire Academy or your division specifically, and be familiar with employee requirements and responsibilities. (All of the Academy Plans have been posted online.)
- Complete annual requirement for facility security awareness training in accordance with Order 1600.69, FAA Facility Security Management Program.

- All employees are required to wear their MMAC ID Badge at all times when on the Center.

NATIONAL DEFENSE EMERGENCIES

Procedures for Increasing our National Defense Readiness Posture

Each FAA readiness level requires an increase in the Academy's readiness posture. Following are the responses to each level. More detail regarding all readiness levels is available in AC 1900.12B. The following excerpts from that document require Academy actions ***(readiness level designators from AC 1900.12B are indicated in parentheses).***

READINESS LEVEL ALFA – Readiness level Alfa involves the initiation of preparatory actions when potential major disasters or other situations, such as civil disturbances, may occur within 72 hours, or a potential foreign threat to U.S. security is identified. Response to this level involves very few personnel and has little effect on normal Academy activities. When level Alfa is declared, these actions are taken automatically.
All managers/supervisors shall:

(1) Review their emergency operations plans. **(RA 1)**
(2) Review the information requirements, submission timing, and other details for the FAA Situation Report (Appendix 1 of the Aeronautical Center Emergency Operations Plan, AC 1900.12B). **(RA 2)**
(3) Review appropriate orders and manuals involving the protection of FAA facilities and equipment. **(RA 3)**
(4) Notify the Academy's ERO when readiness level ALFA is attained. Once all divisions have reported, he/she shall in turn inform the Operations Center (AMP-10) that the Academy has achieved this level. **(RA 11)**
(5) Review physical security requirements for at-risk installations. Initiate required actions. **(RA 12)**
(6) Initiate the central recording of all emergency related personnel and equipment expenses. **(RA 13)**
(7) Review contingency plans for those facilities that have agreements with the military. **(RA 14)**
(8) Review and update emergency assignments and personnel recall procedures. **(RA 15)**
(9) Update vital records. **(RA 16)**
(10) Review and update their Operational Lines of Succession (OLS). **(RA 18)**

READINESS LEVEL BRAVO – Readiness level Bravo involves the initiation of preparatory actions when potential major disasters or other situations, such as civil disturbances, may occur within 48 hours, or a potential foreign threat to U.S. security is identified. When this level is declared, these actions will be taken.
All managers/supervisors shall (with minimal disclosure to the general public):

(1) Implement appropriate actions for the protection of FAA personnel and facilities. **(RB 1)**

(2) Review deployment and sustainability plans for emergency repair and restoration personnel. **(RB 7)**
(3) Review plans for dispersal of FAA aircraft. Disperse aircraft, if necessary. **(RB 8)**
(4) Disseminate all local warning and evacuation orders to FAA employees, dependents, and contractors. **(RB 10)**
(5) Provide survival information and assistance to FAA dependents. **(RB 11)**
(6) Notify the Academy's ERO when readiness level BRAVO is attained. Once all divisions have reported, he/she shall in turn inform the Operations Center (AMP-10) that the Academy has achieved this level. **(RB 14)**
(7) Review personnel leave status, emergency personnel assignments, and personnel recall procedures. **(RB 15)**
(8) Review national security aviation-related plans. **(RB 17)**
(9) If applicable, submit a daily FAA Situation Report (Appendix 1 of the Aeronautical Center Emergency Operations Plan, AC 1900.12B) to AVR-1 on the status and location of aircraft owned or operated by FAA. **(RB 18)**
(10) Work with the Academy's ERO to ensure that all current vital records are located at the Emergency Operating Facility. **(RB 20)**

READINESS LEVEL CHARLIE – Readiness level Charlie involves the initiation of preparatory actions when potential major disasters or other similar situations may occur within 24 hours, or a foreign threat to U.S. security is identified.
All managers shall take selected measures from the following list, as directed by the Superintendent:
(1) Forward deploy emergency repair crews, if appropriate. **(RC 3)**
(2) Disseminate to FAA employees, dependents, and contractors all local warning and evacuation orders. **(RC 4)**
(3) Provide assistance to FAA employees and dependents, if appropriate. **(RC 5)**
(4) Notify the Academy's ERO when readiness level CHARLIE is attained. Once all divisions have reported, he/she shall in turn inform the Operations Center (AMP-10) that the Academy has achieved this level. **(RC 7)**
(5) Curtail or postpone nonessential Agency activities. **(RC 11)**
(6) Release nonessential personnel. Place on administrative leave status. **(RC 12)**
(7) Disperse Agency aircraft in accordance with FAA Order 1900.33, Flight Standards Defense Readiness Guide, or as directed by AVR-1. **(RC 14)**
(8) The Academy Superintendent should be prepared for Security Control of Air Traffic and Navigation Aids (SCATANA) implementation (national security-related). **(RC 15)**
(9) Recall FAA personnel in training away from the duty station (national security-related). **(RC 17)**
(10) Suspend FAA-sponsored training programs (national security-

related). **(RC 18)**

(11) Cancel approval of routine leave for essential personnel. If needed, recall other personnel on leave or travel to meet emergency assignments (national security-related). **(RC 19)**

(12) Institute maximum-security measures at the FAA Academy. **(RC 21)**

READINESS LEVEL DELTA – Readiness level Delta involves post-event and reconstitution actions.

All managers shall take the following measures:

(1) Conduct a damage assessment and determine the status of FAA personnel. Forward the information to the Academy Superintendent and/or Emergency Readiness Officer as requested. **(RD 1)**

(2) Notify the Academy's ERO when readiness level DELTA is attained. Once all divisions have reported, he/she shall in turn inform the Operations Center (AMP-10) that the Academy has achieved this level. **(RD 6)**

Security Control (SECON) Measures

The following is only a very brief summary of SECON items most pertinent to Academy employees themselves. The list does not include items specifically related to Security and guard functions. However, all personnel should familiarize themselves with **all** SECON requirements listed on pages 39-45 of FAA Order 1900.1F, including those that mainly refer to responsibilities of others. If you do not have immediate access to the order, borrow it from your branch or division office or obtain it from Distribution (AMI-700B, x43771).

All SECON levels:

- Managers/supervisors should notify all FAA and contract personnel in their area when a new SECON level is in effect, and ensure they are briefed on the significance of that threat level and their responsibilities.
- Upon moving to a new SECON level, review plans for implementation of the measures in the higher SECON levels.
- All FAA and contract personnel must display their identification badges at all times while at work.
- All personnel should understand the importance of immediately reporting suspicious activity to their supervisor or manager, and supervisors/managers should forward such reports to the Academy Emergency Readiness Officer as necessary.
- Through their chain of command, managers/supervisors should notify the Academy Emergency Readiness Officer once they have attained each level.

The following SECON levels are cumulative. For example, at SECON Level Charlie, the most stringent of all actions required by SECON Levels Alfa, Bravo and Charlie are in effect.

SECON LEVEL ALFA:

- At regular intervals remind all personnel to be suspicious and inquisitive about strangers, particularly those carrying suitcases or other containers. Remain alert for unidentified vehicles on or in the vicinity of FAA facilities and for abandoned parcels, suitcases, or any unusual activity. Report suspicious activities to your manager.
- Secure buildings, rooms, and storage areas that are used on a regular basis.
- Ensure that all emergency contact and notification lists are current and accurate (see Order 1900.1F, page 40, SA8, for details).
- As a deterrent, apply the following measures on a random basis:
  - Secure and regularly inspect all buildings, rooms, and storage areas **not** in regular use.
  - At the beginning and end of each workday and at other staggered intervals, inspect the interior and exterior of buildings for suspicious activity or packages.
  - Check all deliveries and mail, remaining alert for suspicious signs listed in Order 1900.1F, page 40, SA12 (3).

SECON LEVEL BRAVO:

- On a **regular** basis, apply the following measures:
  - Secure and regularly inspect all buildings, rooms, and storage areas **not** in regular use.
  - At the beginning and end of each workday and at other staggered intervals, inspect the interior and exterior of buildings for suspicious activity or packages.
  - Check all deliveries and mail, remaining alert for suspicious signs listed in Order 1900.1F, page 40, SA12 (3).
- Managers/supervisors should make staff aware of the general situation and current threat information in order to stop rumors and prevent unnecessary alarm.
- Establish basic control procedures to limit unescorted access (utilizing receptionists, temporary barriers, or similar measures).

SECON LEVEL CHARLIE:

- No additional pertinent activities other than those implemented by Security (see Order 1900.1F, page 43).

SECON LEVEL DELTA:

- Be aware of any suspicious signs of tampering around your car (see Order 1900.1F, page 44, SD4).

SAFETY, SECURITY, AND CONTINUITY OF OPERATIONS

Identification Badge

All students and employees at the Academy are required to have their FAA identification (ID) visible at all times while at the Aeronautical Center. The badge should be worn on the outer clothing above the waist and below the neck. If you need a clip or chain to display your ID, contact your supervisor.

If a student needs a temporary ID, contact the Student Services office in the Academy Building, Room 137. A copy of his/her travel orders and picture ID are required.

Security of Buildings

A private, uniformed security guard force has the responsibility of enforcing local rules and regulations of the Aeronautical Center. It is the responsibility of employees to cooperate with the guards in protecting Government property and facilities. The guards are authorized to ask questions and make requests of employees in the performance of their duties. During other-than-normal duty hours, all buildings are locked.

Since the Alfred P. Murrah Federal Building bombing in April 1995, the Aeronautical Center has become increasingly aware of the need to provide a higher level of security. This awareness has resulted in the Center Management Team taking preventive actions regarding building security. We are continually encouraged to be aware of ways to increase our security measures. Report suspicious people or activities to your manager and/or MMAC security personnel.

All personal items are the responsibility of the owners and should not be left unattended in buildings or classrooms or in unsecured vehicles.

Gates at Entrances of Center

In order to limit access and provide additional security, the entrances of the Aeronautical Center have been closed to the general public. Guard gates are located at the north and south ends of MacArthur Boulevard between SW 59th Street and SW 74th Street. Card gate entrances have been established at several other locations. Locked gates and fences around certain areas also help secure these areas. The north guard gate will be open 24-hours a day, 7 days a week. The south gate is scheduled to be open from 5:30 a.m. to 6:30 p.m., Monday through Friday, except Federal holidays.

NOTE: On a random basis, driver's licenses may be checked before entering the Center. Also, when Security Condition (SECON) levels dictate, all employees should expect one or more of the following:

- Positive ID checks
- Full car searches
- Requirements for visitor escorts.

Vehicle Security

In order for you to fully enjoy the benefits of the parking at the Center, you are reminded of a few rules to help prevent loss of your personal property.

Always keep valuable items out of sight. It is best to keep them in the trunk where they cannot be seen, reducing the temptation to those who might be wandering in the area. It is recommended you use any additional locking mechanism available to you to protect items such as T-tops, spare tires, etc.

Remember to always roll up the windows and lock the doors on your vehicle. Not only can this help prevent the theft of your personal belongings in the vehicle such as radar detectors, radios, CB's, and other items lying loose in the vehicle, but thunderstorms can come up very quickly in Oklahoma.

Even though parking facilities are provided for your benefit, the FAA assumes no liability for your vehicle while it is parked here. If you do experience a loss while your personally-owned vehicle is parked at the Aeronautical Center, it is your responsibility to:

- Immediately report it to the Security Guards at 954-4566.
- Complete and submit AC Form 1600-5, Report of Missing/Stolen/Damaged Property, to the Civil Aviation Security Division (AMC-700), ARB Room 124, 954-3212.

Weapons at the MMAC

Federal law prohibits possession of a firearm or other dangerous weapon in or on a Federal facility. Additionally, FAA Order 1600.69, Appendix 12, Section 1, Paragraph 2(a) prohibits the possession of a firearm or any other dangerous weapon on FAA-owned, FAA-leased, or GSA -leased property. The MMAC is a leased Federal facility. Although the state of Oklahoma has passed a law permitting the licensed possession of concealed handguns, concealed weapons are not permitted on the MMAC. If an employee, student, contractor, or visitor has in their personal possession or vehicle a concealed weapon while on FAA property including the MMAC parking lots, leased property, or into any of the leased buildings, they are in violation of Federal Law and subject to prosecution. If convicted of the offense that person is subject to loss of employment, fines, and/or imprisonment. It also does not matter whether the gun is loaded or not.

Do not bring a firearm or dangerous weapon on the Mike Monroney Aeronautical Center!

National and Local Emergencies

Employees at the Aeronautical Center will be provided shelter in Aeronautical Center basement shelters in the event an attack warning is received for the Oklahoma City area.

In the event of an enemy attack on the United States, some employees may be prevented, because of the attack, from reporting to their regular places of work or to a previously designated official FAA emergency location.

Many FAA employees will have standing instructions regarding the emergency posts of duty to which they are expected to report, but any employee who is cut off by reason of enemy attack from contact with the FAA is obligated to:

- Go to the nearest post office as soon as it is safe to do so.
- Ask for a Federal employee registration card.
- Fill it out.
- Return it to the post office.

This information will be used in:

- Locating and returning missing employees to duty.
- Keeping them on the FAA's active roster until they can be returned to duty.
- Forwarding pay to the employee.

Facility Security Awareness Training

In accordance with Order 1600.69, FAA Facility Security Management Program, Chapter 8, Section 804, all employees and contractors are required to complete Facility Security Awareness Training as follows:

- **Orientation:** This training shall be given to new employees and supporting contractors within 30 days of arrival at any FAA facility or worksite. Training shall be in accordance with current direction/ materials provided by the Aeronautical Center's Civil Aviation Security Division (AMC-700).
- **Refresher Training:** Training is given on an annual basis and covers the overview of the issues provided for orientation training and new information specific to the facility. Other security issues of concern to employees must also be addressed during this training session.
- **Specific Event Notification**: Special security measures to be used during the duration of an event will be briefed to facility employees. Special events include VIP visits, implementation of FAA security conditions (SECON) and readiness alert levels, local security incidents, emergency situations, visits by foreign nationals, and any other events determined by the manager.

Continuity of Operations Plan (COOP)

In accordance with AC Order 1900.13, Aeronautical Center COOP, an FAA Academy COOP Plan was developed and posted online. This plan provides policy and guidance for the Academy to ensure critical training operations are continued in the event of an emergency which renders all or a portion of the complex uninhabitable, possibly requiring one or more moves to other facilities. All employees should review this plan and familiarize themselves with the requirements.

First Aid & CPR

Basic First Aid and CPR Capability: Those employees who are currently CPR-certified and have completed first aid training should be identified and available, if necessary.

Maintenance of First Aid Kits: Each Academy division is responsible for maintaining and stocking the kits installed in their areas. Divisions should contact AMP-10, x4-3503, if additional supplies are required or if any special requirements should arise.

WEATHER INFORMATION

Hazardous Winter Weather

During the winter season, there is the possibility of snow and blizzard conditions, which might make travel to and from the Aeronautical Center impossible or very hazardous until streets and roads are cleared. When such conditions do arise, the Aeronautical Center may be closed to all but essential employees. The FAA Academy's Snow and Blizzard Plan is posted online.

Employees are expected to report for work and students are expected to report for classes unless Center closing is announced by the news media, the Center voice mail box (954-0040), or the Center web site, http://www.mmac.jccbi.gov/mmac/ (click on "Center Status" in the left column).
DO NOT CALL THE AERONAUTICAL CENTER OPERATIONS OFFICER OR SECURITY GUARDS. Their lines need to be kept clear for emergency messages.

During normal class hours, students will be notified by their instructor when a decision is made for early closing due to hazardous weather. Students will be briefed during initial class orientation and monthly thereafter on this procedure.

Radio and Television Broadcast

Official announcements will be broadcast over these stations in the Oklahoma City area.

RADIO (These are full-time stations, not just dawn to dusk)		
WKY (AM) 930 kHz	KTOK (AM) 1000 kHz	KOMA (AM) 1520 kHz

TELEVISION		
KFOR (Channel 4)	KOCO (Channel 5)	KWTV (Channel 9)

Voice Mail Boxes

The Operations Officer has set up a voice mail box where employees and students can obtain information about Center closure during inclement weather conditions. The number is 954-0040. The default message will be words to the effect: "It is business as usual at the Aeronautical Center." Should any decision be made by upper management regarding the Center status, the Operations Officer will update the message with the pertinent information.

There is also a Student Services voice mail recording at 954-3923. That announcement will include both Academy class and student bus operational status.

MMAC Internet Weather Advisory

Employees may also call up the MMAC Weather Advisory on the Internet at http://www.mmac.jccbi.gov/mmac (Select Center Status) for the latest information.

Time Information is Available

If the Aeronautical Center's operational status has been impacted by severe weather, all of the telephone and internet advisories listed above should be available by:

Operation Status	Time Available
Daytime	5:30 a.m.
Nighttime	2:30 p.m.

Travel Routes

The Oklahoma City street department has the responsibility to keep routes open to the Aeronautical Center. These routes are as follows:

SW 89th Street	from May Avenue to I-44
SW 59th Street	from May Avenue to Portland Avenue
Portland Avenue	from Reno Avenue to SW 54th Street
Airport Road	from I-44 to Council Road
Meridian Avenue	from Reno to SW 54th Street
SH-152	from Portland to Council Road
MacArthur Boulevard	from NW 23rd Street to SW 104th Street
SW 104th Street	from MacArthur Boulevard to I-44
SW 54th Street	from Portland Avenue to MacArthur Boulevard
Rockwell Avenue	from SW 59th Street to SW 74th Street

Reminders to all Employees

Listed below are reminders to all employees in the event such a closing seems to be in order:

- There are some key personnel whose presence at the Aeronautical Center might be required, regardless of weather conditions. The Superintendent, office heads, and division managers will determine such personnel based on individual emergencies.
- Any decision for early closing or not to open the Center for business at the normal time will be communicated by radio and television announcements and the Center voice mail box.

Tornado Safety Tips

Tornadoes are nature's most violent and erratic storms. A tornado can travel for miles along the ground, lift, and suddenly change direction and strike again. There is little you can do to protect your home or workplace from the strength of tornadic winds, but there are actions you can take to protect yourself and your family.

When a tornado is coming, you have only a short amount of time to make life-or-death decisions. Advance planning and quick response are the keys to surviving a tornado. Below are suggested plans of action for Academy personnel and information provided by the Federal Emergency Management Agency (FEMA) to assist you in preparing for tornadoes and other kinds of severe weather.

Although there is no guaranteed safe place during a tornado, some locations are better than others. By following these suggested safety tips, you can increase your chance for survival.

Basic Safety Rules:

- Keep alert for changing weather conditions.
- Take shelter immediately when you hear a tornado warning or see a funnel cloud.
- Know where your shelter is before you need it.

Tornado Alerts

A **TORNADO WATCH** is given when weather conditions are favorable for the formation of tornadoes, for example, during a severe thunderstorm. During a tornado watch, keep an eye on the weather and be prepared to take shelter immediately if conditions worsen. This is the time to remind family members where the safest places are located, and listen to the radio or television for further developments.

A **TORNADO WARNING** is given when a tornado funnel is sighted or indicated by radar. You should take shelter immediately. Because tornadoes can form and move quickly, there may not be time for a warning. That's why it's important to stay alert during severe storms.

Discuss with family members the difference between a "tornado watch" and a "tornado warning".

During Duty Hours

Aeronautical Center severe weather advisories will be issued via a telephonic notification plan to staff offices and divisions, or in the case of a tornado, warnings will be transmitted via the public address (PA) system and sirens (for those outdoors). Tornado shelters are posted in each office, classroom, and lab.

In case of an actual tornado or tornado drill, move to the appropriate "safe area(s)" in your building, as described on the tornado warning diagram

posted in your room. A public announcement will be made after 4 p.m. for evening students/instructors, alerting them to the possibility of severe weather before it becomes an official warning. This alert will remind students and faculty to remain alert for further PA announcements on the developing situations.

Tornado Danger
Learn these tornado danger signs:
An approaching cloud of debris can mark the location of a tornado, even if a funnel is not visible. Before a tornado hits, the wind may die down and the air may become very still. Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

Shelter
When a tornado warning is issued, take shelter in a building with a strong foundation (appropriate areas within these buildings are specified on the Academy's tornado posters). If shelter is not available, lie in a ditch or low-lying area.

During Tornado
Get to shelter immediately. AVOID WINDOWS. Flying glass can injure or kill. Don't open windows or doors. Buildings don't "explode" and allowing strong winds in can do damage or cause injury. Go at once to the basement, storm cellar, or the lowest level of the building. If there is no basement, go to an inner hallway or a smaller inner room without windows, such as a bathroom or closet. Go to the center of the room. Stay away from corners, because they tend to attract debris. Get under a piece of sturdy furniture such as a workbench or heavy table or desk, and hold on to it. Use arms to protect head and neck. If on duty, find shelter using tornado posters, and ensure that you remain within safe areas as posted.

Long span buildings are dangerous. The entire roof structure is supported solely by the outside walls. Inside walls are usually false or non-load bearing walls. If you are caught in an open building like a shopping mall, civic center, indoor pool, theater, or gymnasium during a tornado, stay away from windows. Get into the restroom, if possible. In larger buildings, the restrooms are usually made from concrete block. Besides having four walls and plumbing holding things together, metal partitions help support any falling debris. Do not use the elevators; the power may go off and you could become trapped. Extra precautions are needed in schools, hospitals, nursing homes, and office buildings. Not only is there a large concentration of people in a small area, but these buildings usually have large amounts of glass on the outside walls.

If outdoors, do not go into a grove of trees or under a vehicle. If you are outside, don't go into damaged buildings; they may collapse completely. Wait for help to search for others. If possible, get inside a building. If shelter is not available or there is no time to get indoors, lie in a ditch or low-

lying area, or crouch near a strong building. Be aware of the potential for flooding. Use arms to protect head and neck.

The least desirable place to be during a tornado is in a motor vehicle. Cars, buses, and trucks are tossed easily by tornadic winds. **DO NOT TRY TO OUTRUN A TORNADO IN YOUR CAR.** Tornadoes can change direction quickly and can lift up a car or truck and toss it through the air. Get out of the car immediately and seek shelter in a nearby building. If there is no time to get indoors, get out of the car and lie in a ditch or low-lying area away from the vehicle. Be aware of the potential for flooding.

After Tornado

Help injured or trapped persons. Give first aid when appropriate. Don't try to move the seriously injured unless they are in immediate danger of further injury. Call for help. Remember to help your neighbors who may require special assistance – if at work, that would include people with disabilities; if at home that would also include infants and the elderly. Turn on the radio or television to get the latest emergency information.

- Stay out of damaged structures. Return to the office or home only when authorities say it is safe.
- Use the telephone only for emergency calls.
- Clean up spilled medicines, bleaches, or gasoline or other flammable liquids immediately. Leave the structure if you smell gas or chemical fumes.

Utilities Damage

Check for gas leaks. If you smell gas or hear a blowing or hissing noise, quickly leave the structure. If at home, turn off the gas at the outside main valve if you can, and call the gas company.

Look for electrical system damage. If at home and you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.

Check for sewage and water lines damage. If you suspect sewage lines are damaged, avoid using toilets and call a plumber. If at home and water pipes are damaged, contact the water company and avoid using water from the tap. You can obtain safe water by melting ice cubes.

Fujita Scale
The Fujita-Pearson Tornado Scale offers a measure of tornado destructiveness:

F-0: 40-72 mph, chimney damage, tree branches broken.

F-1: 73-112 mph, mobile homes pushed off foundation or overturned.

F-2: 113-157 mph, considerable damage, mobile homes demolished, large trees snapped or uprooted.

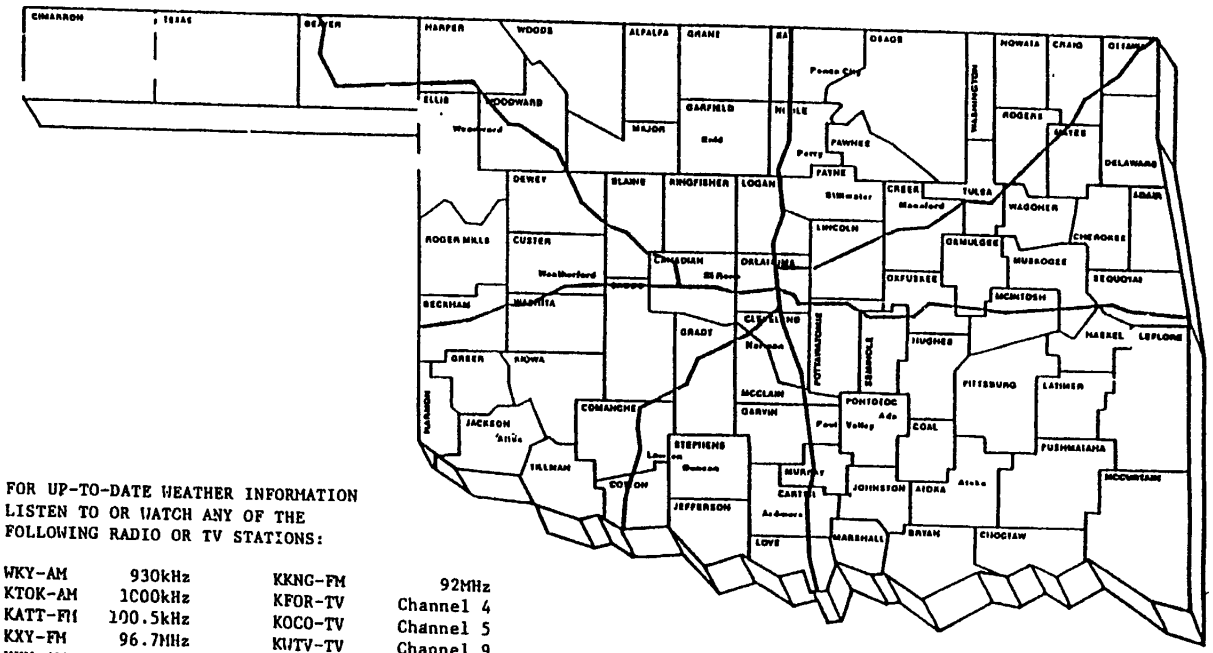
F-3: 158-205 mph, roofs/walls torn down, trains overturned, cars thrown.

F-4: 206-260 mph, well-constructed walls leveled.

F-5: 261-318 mph, homes lifted off foundation and carried considerable distances, autos thrown as far as 100 meters.

An announcement of a tornado warning will be made via the public address system. If outside with no time to take shelter, lie face down in the nearest depression (e.g., a ditch or culvert).

Storm Spotters Network



FOR UP-TO-DATE WEATHER INFORMATION
LISTEN TO OR WATCH ANY OF THE
FOLLOWING RADIO OR TV STATIONS:

WKY-AM	930kHz	KKNG-FM	92MHz
KTOK-AM	1000kHz	KFOR-TV	Channel 4
KATT-FM	100.5kHz	KOCO-TV	Channel 5
KXY-FM	96.7MHz	KWTV-TV	Channel 9
KXY-AM	1340kHz		

BUILDING	PRIMARY TORNADO SHELTER
Academy HQ	Academy-STB Tunnel (line up on sides, leaving walkway in center)
ANF-1	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
ANF-2	Crouch in first floor all-interior-walled areas as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
ARSR-1/2 (Bldg. and trailer)	If adequate warning is received, and leaving this structure will not endanger you, go to Academy-STB tunnel (line up on sides, leaving walkway in center) or STB Basement.
ARSR-3	If adequate warning is received, and leaving this structure will not endanger you, go to GNAS Bldg. interior areas.
ARSR-4	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
ASDE-3	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
ASR-7/SSVM	If adequate warning is received, and leaving these structures will not endanger you, go to Registry Bldg. Tunnel/Basement. Registry Bldg. basement accessible, without using camera doors, through Fitness Ctr door on east side of Registry Bldg. til 8 pm.
ASR-8	If adequate warning is received, and leaving this structure will not endanger you, go to GNAS Bldg. interior areas.
ASR-9	If adequate warning is received, and leaving this structure will not endanger you, go to Registry Bldg. Tunnel/Basement. This is always the primary tornado shelter for this structure. (Registry Bldg basement accessible without using camera doors, through Fitness Ctr. door on east side of Registry Bldg. until 8 p.m. After that, go to camera doors.)
Bldg 3 (AT Bldg.)	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
Bldg. 6	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
ESS	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
Flight Inspection Bldg.	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
FPS-66	If adequate warning is received, and leaving this structure will not endanger you, go to Academy-STB Tunnel (line up on sides, leaving walkway in center) or STB Basement.
GNAS	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
Hangar 9E	Crouch in first floor all-interior-walled areas or hallway as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
Hangar 10	If adequate warning is received, and leaving this structure will not endanger you, go to Hangar 9-East (immediately north of this hangar). Crouch in first floor all-interior-walled rooms and hallways of Hangar 9-East, as assigned on poster, covering your head. If in hallway, crouch as far away as possible from any glass exit, remaining within "boundary signs".
LSTC Building	If adequate warning is received, and leaving this structure will not endanger you, go to VOR/TACAN/DME Bldg. Crouch in restroom/classroom/lab/ office with all-interior walls, covering your head.
Mark 1D	If adequate warning is received, and leaving this structure will not endanger you, go to VOR/TACAN/DME Bldg. Crouch in restroom/classroom/lab/ office with all-interior walls, covering your head.
Mark 1E	If adequate warning is received, and leaving this structure will not endanger you, go to VOR/TACAN/DME Bldg. Crouch in restroom/classroom/lab/ office with all-interior walls, covering your head.
Mark 1F	If adequate warning is received, and leaving this structure will not endanger you, go to VOR/TACAN/DME Bldg. Crouch in restroom/classroom/lab/ office with all-interior walls, covering your head.
Mark 20	If adequate warning is received, and leaving this structure will not endanger you, go to VOR/TACAN/DME Bldg. Crouch in restroom/classroom/lab/ office with all-interior walls, covering your head.
Mark 20 Annex	If adequate warning is received, and leaving this structure will not endanger you, go to VOR/TACAN/DME Bldg. Crouch in restroom/classroom/lab/ office with all-interior walls, covering your head.
RTF	RTF Basement
STB	Academy-STB Tunnel (line up on sides, leaving walkway in center) or STB Basement.
STB Annex	Academy-STB Tunnel (line up on sides, leaving walkway in center) or STB Basement.

BUILDING (CONT.)	PRIMARY TORNADO SHELTER (CONT.)
TDWR	Crouch in all-interior-walled areas as assigned on poster, covering your head.
Stafford Bldg.	Stafford Bldg. Basement
VOR/TACAN/DME	Crouch in restroom/classroom/lab/office with all-interior walls, as assigned on poster, covering head

NOTES: ***Acceptable shelter areas within each structure are clearly marked on posters at classroom exits.***
In all cases, secondary tornado shelter is next-nearest tunnel or basement.

Thunderstorms

The terms you should be familiar with during severe thunderstorms are:

Alert	Classification
Severe Thunderstorm Watch	Atmospheric conditions are conducive to the formation of severe thunderstorms.
Severe Thunderstorm Warning	A severe thunderstorm has developed and might be approaching your location.

Lightning Safety Tips

Do you know what to do if you are caught in the open during a thunderstorm? Lightning can strike up to several miles away from the thunderstorm. The following are lightning safety tips provided by the National Weather Service Forecast Office in Norman, Oklahoma.

- When inside:
  - Avoid using the telephone (except for emergencies) or other electrical appliances.
  - Do not take a bath or shower.
- If caught outdoors:
  - Go to a safe shelter immediately! This could be inside a sturdy building. A pickup truck or hard top automobile with windows up can also offer fair protection from lightning. (However, do not attempt to take cover in a vehicle during a tornado!).
  - If you are boating or swimming, get out of the water immediately and move to a safe shelter away from the water!
  - If you are in a wooded area, seek shelter under a thick growth of relative small trees. (However, avoid groves of trees in a tornado.)
  - If you feel your hair standing on end, squat with your head between your knees. Do not lie flat!
  - Avoid isolated trees or other objects, bodies of water, sheds, fences, convertible automobiles, tractors, and motorcycles.

Flash Flood Safety Tips

Flash floods develop quickly. They can occur anywhere, along rivers or creeks, in low water crossings or in a dry streambed. They can occur during any month and at any time during the day. In fact, flash floods often occur at night when it is difficult to find an escape route. The following are flash flood safety tips provided by the National Weather Service Forecast Office in Norman, Oklahoma.

When driving:

- Avoid low water crossings.
- Use alternate routes to avoid flood-prone areas.
- Leave your vehicle immediately if it stalls in floodwaters.
- Move to higher ground if you can do so safely.
- Most cars and light trucks will begin to float in as little as 1 to 2 feet of water. Once afloat, all control over the vehicle's movements is lost.

- **Act quickly.**
  - Rising waters make vehicle doors difficult if not impossible to open.
- **If you are outside:**
  - Everyone, especially children, should stay away from flooded creeks, streams, or drainage ditches.
  - Swiftly flowing water can quickly sweep away even the strongest swimmers.
  - Soggy banks can collapse, dumping you into floodwaters.

Physically Challenged

If you have any physical challenge, which necessitates aid in exiting the building, walking approximately 1,000 feet, or standing in an open area for approximately 1 hour, please advise your supervisor. Students should advise their instructors.

The supervisor or instructor should ensure, for each physically challenged person, at least two able, volunteering individuals are named. These individuals shall understand it is their responsibility to ensure the safe evacuation of that person in any emergency. All personnel in the disabled person's office or class should be aware and prepared to substitute for the two named persons if necessary. Additionally, bomb, tornado, and fire evacuation procedures should be practiced with each disabled person and his/her "buddies" when he/she first enters the office or the class.

Use of Stair-Trac

In the Academy there are two Garaventa Stair-Trac emergency evacuation wheelchair lifts available for use to assist physically disabled personnel in going up and down stairs in an emergency situation such as a fire. These wheelchair lifts shall be tested for proper operation once every six months. Also, training shall be made available at least once each year for all Academy personnel with physical disabilities requiring wheelchairs, as well as their office "buddies". Currently, Airway Facilities Training Operations and Technologies Support Branch (AMA-405) has graciously volunteered to carry out both of these duties. These lifts are located in the:

Building	Floor	Direction
TPSB	Second floor	West end
STB	First floor	West hallway

The Stair-Trac can be used anytime the elevators are disabled and a physically disabled person needs to be transported up or down stairs.

FIRE EMERGENCIES

Fire Procedures

Aeronautical Center buildings and facilities are monitored by electronic alarm systems that provide automatic warning, reporting, and sprinkler action when activated.

Each classroom, laboratory, and office has a fire evacuation route posted near the exit(s). Students and employees should familiarize themselves with the evacuation routes from these areas and be prepared in the event of an emergency. Elevators will not be used by anyone. If it is impossible to avoid heavy smoke when evacuating, stay as close to the floor as possible and, if possible, breathe through a damp piece of cloth.

The following procedures are provided when reporting a fire:

Reporting Procedures:

- Alert personnel in the immediate area.
- Activate the nearest manual fire alarm box.
- Call "911" (911 will automatically transfer to 4-3444 on a campus phone) or 4-3444 immediately from any campus phone. If you are using a cell phone, you must dial (405) 954-3444. All emergency calls must go through the security guard dispatcher to ensure emergency vehicles are met at the entrance gate, cleared, and escorted to the emergency location. Give name and telephone extension and state "I WANT TO REPORT A FIRE." Give specific information as to building, location.
- Exit the building. When evacuated from the building, all personnel will remain no closer than 100 feet from the building and stay clear of roadways and vehicle traffic lanes.

Monitoring Fire Calls:

- The contract security guard will verify and if needed, immediately relay any report of fire to the OKC or Will Rogers World Airport fire department. Local ambulance service will be requested, as required.
- The Operations Center Officer is responsible for notification of management personnel as stated in the Aeronautical Center emergency response plan.

BOMB THREATS

Receiving a Bomb Threat

Upon receipt of a telephone bomb threat, employees will utilize FAA Form 1600-53, as a guide to gather and disseminate information. If an employee receives a suspicious package or observes a suspicious package, they will immediately notify the guard dispatch at extension 4-3444. If an employee receives an in-person bomb threat, that employee will also contact the guard dispatch. The guard dispatch will notify the Operations Center, in accordance with their standard operating procedure (SOP).

Notification and Evacuation Procedures

If it is determined that a building should be evacuated due to a bomb alert, notification will normally be made over the public address system. Notification may be different, however, depending on the nature of the threat.

- All employees will evacuate the threatened building in accordance with the routes identified in the fire evacuation diagrams posted in each office/classroom. Once the building has been evacuated, employees should go to their designated bomb evacuation areas.
- Disabled employees are permitted to use the elevators.
- As each employee evacuates his/her immediate work area, they are responsible for visually searching their own office/desk areas and the classroom/laboratory, if they are in charge of the class, for any unusual packages, briefcases, and boxes that look suspicious in nature.
- Managers/supervisors should search their storerooms and closets. These areas should be locked to reduce the risk of placement of an explosive device in these areas.
- If there are none, they should lock their areas/offices and proceed via the evacuation route to the nearest/assigned evacuation area.
- If an employee noticed a suspicious item on their way out of the building, they should leave the door open to the area and report this immediately to the Security Guards at 4-3444.

SUSPICIOUS OR UNUSUAL OBJECTS WILL NOT BE TOUCHED OR MOVED!

- Employees/students are to go to their building evacuation area.
- Employees/students should not depart the Aeronautical Center, because the manager or supervisor must accomplish head counts.
- The "all clear" will come from the Operations Center via the PA system or from the security guards or members of the AMP staff by word of mouth within evacuation areas.

DESIGNATED BOMB THREAT SAFETY AREAS

BUILDING	EVACUATION AREA
Academy HQ	East to key card gate on north side of Hgr 9. Through gate to eastern edge of ramp.
ANF-1	East to key card gate on north side of Hgr 9. Through gate to eastern edge of ramp.
ANF-2	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
ARSR-1/2	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
ARSR-3	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
ARSR-4	Move at least 100 yards from building to meeting area pre-designated by instructor(s).
ASDE-3	North along Duke Avenue to gate on south side of Hangar 10. Then east through gate to abandoned runway or southeast corner of ramp.
ASR-7	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
ASR-8	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
ASR-9	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
Bldg. 3 (AT Bldg.)	East to key card gate on north side of Hgr 9. Through gate to eastern edge of ramp.
Bldg. 6	East to key card gate on north side of Hgr 9. Through gate to eastern edge of ramp.
ESS	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
Flight Inspection Bldg.	East to key card gate on north side of Hgr 9. Through gate to eastern edge of ramp.
FPS-66	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
GNAS	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
Hangar 9	East to eastern edge of ramp.
Hangar 10	East to eastern edge of ramp.
LSTC Building	North along access road to "Y" in the road with access road to VOR/TAC/DME.
Mark 1D	North along access road to "Y" in the road with access road to VOR/TAC/DME.
Mark 1E	North along access road to "Y" in the road with access road to VOR/TAC/DME.
Mark 1F	North along access road to "Y" in the road with access road to VOR/TAC/DME.
Mark 20	North along access road to "Y" in the road with access road to VOR/TAC/DME.
Mark 20 Annex	North along access road to "Y" in the road with access road to VOR/TAC/DME.
RTF	East to key card gate on north side of Hgr 9. Through gate to eastern edge of ramp.
STB	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
STB Annex	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
TDWR	SE to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
TPSB	West to Foster Drive (north-south road on west side of Aero. Ctr. inner campus).
VOR/TACAN/DME	South along access drive to "Y" in the road with access road to Landing Systems complex.

NOTE:
Once assembled at bomb evacuation area, team leader or first level supervisor or instructor should try to account for all those for which he/she is responsible.

CIVIL DISTURBANCES

Civil Disturbance Procedures

If it is determined that a civil disturbance is in progress or about to take place, employees and students will be notified either by the public address system or by their immediate manager/supervisor.

Safety Procedures:
Managers/supervisors/instructors are to remain in their buildings and secure entry from the outside by locking the doors. If they cannot secure entry doors to the building, then they must call Security at 4-3444 and notify them the entry doors to the building need to be locked.

Employees and students are to remain in their office/classroom/laboratory and secure entry from the outside by locking the doors.

Each employee/student will survey his/her immediate work area and ensure all Privacy Act and/or For Official Use Only (bearing FOUO stamp) materials are hidden from view by placing in desk, file cabinet, or security container.

VIOLENCE IN THE WORKPLACE

Violence in the Workplace Procedures

Managers and supervisors shall report any instances of bizarre behavior, threats and/or acts of violence against DOT employees or contractor personnel located at the MMAC to the Operations Officer, AMP-10, extension 4-3583.

Employees shall report any instances of bizarre behavior, threats and/or acts of violence against DOT employees or contractor personnel located at the MMAC to their managers/supervisors and to the Operations Officer, AMP-10, extension 4-3583.

Each employee should determine for themselves if a violent act in the workplace is in progress or about to take place by:

- Observance of the situation
- Observance of noise (gun shots, screaming, etc.)
- Observance of others' actions (people running, etc.)
- Notification by their manager or over the public address system.

Safety Procedures:
All personnel are to take whatever counter-measures they deem necessary to block, obstruct, evade, remove, defend, hide, and protect themselves from harm's way.

Managers of classes in progress are to inform the instructor in charge of that class and all students that a violent act is about to take place or is in progress and they are to take whatever action they deem necessary to block, obstruct, evade, remove, defend, hide, and protect themselves from harm's way.

All personnel should consider in advance what they would do in the case of violence in their office. Discuss it with your immediate supervisor and coworkers and be prepared with a plan of action.

PRISON ESCAPEES

Prison Escapee Notification

If it is determined a prisoner(s) has escaped from the Federal Transfer Center, employees and students will be notified by either the public address system or by their immediate manager.

Safety Procedures:
Managers/supervisors/instructors are to remain in their building and secure entry from the outside by locking the doors. If they cannot secure entry doors to the building, then they must call Security at 4-3444 and notify them the entry doors to the building need to be locked.

Employees are to remain in their office/classroom/laboratory and secure entry from the outside by locking the doors.

IMMINENT ATTACK

Procedures and Responsibilities

Warning:

1. Permanent Buildings with PA system. Notification via PA system.
2. Buildings without a PA system and off-site buildings - Managers/supervisors are responsible to notify personnel by telephone, facsimile, or otherwise, as expeditiously as possible.

Procedures:

1. Employees will take cover in the nearest tunnel.
2. Elevators will not be used except for disabled persons.
3. Employees should listen for and follow instructions provided by the public address system or as received by appropriate means.
4. Employees will remain in the shelter until the "all clear" notice.

Responsibilities:

1. Managers/supervisors will ensure all office lights and equipment are turned off and will secure all classified materials.
2. Employees who have specialized emergency duties will go to the designated reporting points and await instructions.

ACTS OF TERRORISM

Terrorism

- Learn about the nature of terrorism. Terrorists often choose targets that offer little danger to themselves and areas with relatively easy public access. Foreign terrorists look for visible targets where they can avoid detection before or after an attack such as international airports, large cities, major international events, resorts, and high-profile landmarks. Learn about the different types of terrorist weapons, including explosives, kidnappings, hijackings, arson, and shootings.
- Prepare to deal with a terrorist incident by adapting many of the same techniques used to prepare for other crises. Be alert and aware of the surrounding area. The very nature of terrorism suggests that there may be little or no warning. Take precautions when traveling. Be aware of conspicuous or unusual behavior. Do not accept packages from strangers. Do not leave luggage unattended. Learn where emergency exits are located. Think ahead about how to evacuate a building, subway or congested public area in a hurry. Learn where staircases are located. Notice your immediate surroundings. Be aware of heavy or breakable objects that could move, fall or break in an explosion.

Explosives

- The use of explosives by terrorists can result in collapsed buildings and fires. Review emergency evacuation procedures. Know where fire exits are located. Keep fire extinguishers in working order. Know where they are located and how to use them. Learn first aid. Contact the local chapter of the American Red Cross for additional information.

Collapsed Buildings

- In a building explosion, get out of the building as quickly and calmly as possible. If items are falling off of bookshelves or from the ceiling, get under a sturdy table or desk. If there is a fire: Stay low to the floor and exit the building as quickly as possible. Cover nose and mouth with a wet cloth. When approaching a closed door, use the palm of your hand and forearm to feel the lower, middle and upper parts of the door. If it is not hot, brace yourself against the door and open it slowly. If it is hot to the touch, do not open the door; seek an alternate escape route. Heavy smoke and poisonous gases collect first along the ceiling. Stay below the smoke at all times.
- If you are trapped in debris, use a flashlight or whistle if you have one. Stay in your area so that you don't kick up dust. Cover your mouth with a handkerchief or clothing. Tap on a pipe or wall so that rescuers can hear where you are. Shout only as a last resort, shouting can cause a person to inhale dangerous amounts of dust.

Assisting Victims

- Untrained persons should not attempt to rescue people who are inside a collapsed building. Wait for emergency personnel to arrive.

CHEMICAL OR BIOLOGICAL AGENTS

Chemical Agent Attacks and Leaks (Including Natural Gas)

- Chemical agents are poisonous gases (such as natural gas), liquids or solids that have toxic effects on people, animals, or plants. Most chemical agents cause serious injuries or death. Severity of injuries depends on the type and amount of the chemical agent used or leaked, and the duration of exposure.
- Exposure to chemical agents can be fatal. In an actual chemical attack, leaving the shelter to rescue or assist victims can be a deadly decision. There is no assistance that the untrained can offer that would likely be of any value to the victims of chemical agents.

Biological Agents

- Biological agents are organisms or toxins that have illness-producing effects on people, livestock and crops. Because biological agents cannot necessarily be detected and may take time to grow and cause a disease, it is almost impossible to know that a biological attack has occurred. If government officials become aware of a biological attack through an informant or warning by terrorists, they will most likely instruct citizens to either seek shelter where they are and seal the premises or evacuate immediately. A person affected by a biological agent requires the immediate attention of professional medical personnel. Some agents are contagious, and victims may need to be quarantined. Also, some medical facilities may not receive victims for fear of contaminating the hospital population.

Procedures to follow in the event of a chemical or biological attack

1. Until you receive further instruction, remain where you are.
   a. If outside, remain there.
   b. If inside, remain there.
2. If you are the first to discover the substance or gas, call "911" immediately from any campus phone. Your call will automatically be routed through 4-3444, and MMAC Security will answer. If you are using a cell phone, you must dial (405) 954-3444. All emergency calls must go through the security guard dispatcher to ensure emergency vehicles are met at the entrance gate, cleared, and escorted to the emergency location.
3. Explain the exact nature of the event.
4. If there is sufficient cause for concern, MMAC Security will forward information to local OKC Police/Fire Departments.
5. It is likely that the air handlers in the affected building(s) will be turned off in order to contain the substance.
6. When they arrive, OKC Police/Fire Officers will take control of the event. They are trained for such an emergency. It is required by law that you follow their instructions fully.

ALL OTHER EMERGENCIES

All Other Types of Emergencies

Notification of any other types of disasters or emergency situations, which are not identified in this plan, will be made by the public address system or the appropriate manager or instructor. Employees and students should be advised to listen to the radio and television for any other pertinent information. Employees and students should take whatever action is deemed necessary to protect themselves.