Technology on the Flight Deck:
There’s Probably an App for That!

Wed. 3/25/2015 | 3:00 p.m. – 3:45 p.m.

PRESENTED BY:
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Questions
Question 1:

Does your flight department use mobile devices on the flight deck?
Question 2:

Does your flight department have written restrictions or limitations as to the use of those devices while in flight?
Tech Library
Global Operations Handbook

iPad Edition

Rev 2
05/16/14
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ICAO Lost Com Procedures:

Ref ICAO Annex 2: Rules of the Air
Ref to Jepp. Text Emergency Tab, Emergency Procedures and State Rules and Procedures for country specific differences to ICAO standards for lost com

Upon loss of normal com:
1. Squawk 7600
2. Attempt to reestablish communication by any means: SATCOM Phone/HF/AFIS

If VMC:
1. Remain in VMC Conditions
2. Land at nearest suitable airport

If IMC:
Non-Radar Environment:
1. Maintain last assigned speed and level (or climb to minimum IFR Altitude if higher) for 20 min following a compulsory reporting pt
2. Then resume the flight plan altitude

Radar Environment:
1. Maintain last assigned speed and level (or climb to minimum IFR Altitude if higher) for 7 min after the latter of the following:
   a. The assigned/min IFR level was reached
   b. The 7600 squawk began
   c. Passing a compulsory reporting pt
2. Then resume the flight plan altitude

Weather Dev:
1. Attempt to obtain ATC clearance
2. If unable to obtain clearance:
   a. Deviation less than 10 nm: maintain assigned FL
   b. Deviation greater than 10 nm:
      "SAND"
      i. South Dev, Ascend 300 feet
      ii. North Dev, Descend 300 feet
3. Broadcast intentions on 121.5 and 123.45

(Return to T of C)
Plotting and Master Document SOPs:

Computerize Flight Plan (CFP) will be used as the Master Document/Journey Log.

Pre-flight Plotting:
- Highlight 50°W, 40°W, 30°W, 20°W
- Plot Flight Plan Route in pencil and label waypoints
- Plot Tracks in pencil and label track names
- Plot ETPs: All Eng. Single Eng. Depress
- FMS/CFP Procedures:
  - FO will enter Wypts into FMS (if no AFIS Upload available)
  - FO will compare PROG PG 1 TIME and DIST to CFP TIME and DIST
  - CA will verify and circle Wypts
  - FO will read track and dist
  - CA will verify and "check" Wypt circle

In-flight Plotting:
- Highlight the Flight Plan Route only after Oceanic Clearance is received
- Crossing Waypoints:
  - PN will add single diagonal cross after crossing Wypt and passing POSIT REP or verifying ADS-C event has been sent
  - PN will add second diagonal cross after passing 10 min of Long position check
- PN will make a "Mid Point" check and plot

In-Flight Replotting/Re-route:
- All New Wypts will be verified by CA

Example: (See Amway IFOM Appendix B)

(Return to T of C)
CPDLC/ADS-C: Flight Procedures

Note:
- Do not load ETAs, etc in the active FMS that are not part of the flight plan
- Do not use Free text if at all possible
- Both pilots should read each message silently and confer on the meaning
- Use the term "ROGER" as a free text affirmative response to a free text UPLINK request from ATC.
- Only request one ATC Required element at a time (i.e. Alt, Speed, Radio, etc)
- Continue to monitor assigned HF frequencies, VHF Guard 121.5, and VHF Common 123.45.

Prior to Coast Out:
- Logon to ATC 15 to 45 minutes prior to Oceanic Entry Point
  Select **NAV**, ATC should go right to ATC LOGOFF.
  Check FLIGHT ID, ADS ARMED, ADS EMERG OFF,
  DATA LINK READY
  Enter: ATC Center four letter ID at 1L.
  Select **SEND** at 6R.
- Prompt at 1R changes momentarily to ACCEPTED. Active ATC Center ID will be displayed at 2R.
- If **BE-SOG ON TO ATC CENTER** scratchpad message is displayed after 10 minutes, attempt
  another logon. If unsuccessful, revert to voice procedures.

Coast Out at Oceanic Entry Point:
- Verify ADS is active and Review ADS Contracts
  Select **NAV**, ATC, ADS REVIEW
  Check: Contracts have been established
  Make HF and SELCAL checks
  "Gander Radio, XXXXVV, CPDLC, Shanwick next, SELCAL XX-XX" **(*)
  **(*) This check-in with Gander will most likely be on VHF. HF and SELCAL checks are still required.
  "New York Radio, XXXXVV, CPDLC, Exit Point XXXX, Miami next, SELCAL XX-XX" **(**
  **(** New York FIR also wants the exit fix from the FIR to be included.

Crossing FIR Boundaries:
- Approximately 10 min prior to the FIR boundary.
  Select **NAV**, ATC, S20066 STATUS
  Check: Active ATC Center has shifted to the new ATC Center ID
  Make HF and SELCAL checks
  Check that ADS-C contracts have been established.
  "Shanwick Radio, XXXXVV, CPDLC, exit point XXXX, SELCAL XX-XX" **(**

Coast In at Oceanic Exit Point:
- ATC will normally terminate the ADS-C and CPDLC connections but if the connections are not
  terminated they can be terminated by the crew.
  Select **NAV**, ATC, LOGOFF/STATUS
  Select ADS Non ACTIVE to OFF
  Select PG 2/2 and ATC COMM from ACTIVE to OFF

(Return to T of C)
SAFA Inspection Checklist (BBJ):

Show ISBAO Certificate (Insurance Binder)

A. Flight Deck:
1. Gen Condition
2. Emer Exits
3. Equipmt
   a. TCAS/ACAS (AFM Pg. 14)
   b. GPWS (AFM Pg. 12)
   c. B-RNAV (LOA Binder)
   d. P-RNAV (LOA Binder)
   e. 8.33 MHz (FCOM Section 5.10.2)
   f. FM Immunity (Maintenance Manual)
   g. RVSM (LOA Binder)
4. Manuals (Ships Library, R-side)
5. Checklist/QRH
6. Radio Nav Charts
7. MEL (Jump Seat Drawer, L-side)
8. Cert of Reg (Flight Deck Door)
9. Noise Cert (AFM Appendix 31 Tab, Winglets Mod)
10. Air Operator Cert (NA for FAR Part 91)
11. Radio License (Flight Deck Door)
12. Cert of Airworthiness (Flight Deck Door)
13. Flight Plan (Computerized Flight Plan)
14. W and B (iPad App)
15. Hand Fire Extinguisher (Behind Copilots Seat)
16. Life Jackets (Seat Back Pockets)
17. Harnesses
18. O2 Equip
19. Flash Lights
20. Flight Crew Licenses
21. Journey Log (Computerized Flight Plan)
22. Maintenance Release (Mx Book)
23. Deferral Defect Rectification (Mx Book)
24. Preflight Inspection
Communications Device
Landing Lts ON needs to mean both
Cir to Lt AND Ltg Chs complete

As a guide:
15 nm 200, flaps 1
10 nm 180, flaps 5
5 nm 160, gr den, flaps 15

At big airports, when approaching the hold short, if the runway is active, switch to tower.

Turning IRS to ATT first then back to Nav will keep it in ATT. Must power off.

A single AutoStat Fail is probably a failure of a single SMYD computer. Will also get SPD LIM annun on PFD, it means the stall speed will not display on bottom of tape.

Cabin can be depressed by dialing LFE up to 14,000, then going to MAN and opening the OFV with a couple clicks on the sw. Repositioning LFE to norm and selecting AUTO will start the cabin down at 550 fpm.

With only a few k of fuel in the center tank the Right Center tank pump on des will cause Low Press light and auto-shutoff. Fuel will start drawing from the R wing. Turn both pumps off until level. Same thing happens on climb with Left Center Pump.

PDC: Have the other pilot look at the clearance in FMC after loading the cleared route.

Use "False Wpt" to make a "Longitude Line" if they ask you to report crossing that longitude.

Use care on a visual app if they change nyxs. Make sure of the alt to which you are cleared.

Airports on Nav DU seem to be 4000 or greater.

RKSS CirC Del can adjust your ETD.

Look at airways that connect to the end of arrival if it doesn’t connect to the flight plan route.

"Flight Conditions" is a good way to reference turbulence in foreign airspace.

Service Int is the net that the FAs and Fit are talking on. Turning on the Ser Inter-phone switch adds all the other Ser jacks.

Ground crew is on hot mc on Fit Int.

Start down immediately at 2000 fpm. Try slowing to 1000 at 12000 with SBs.

Don’t pack small items in fwd part of aft cargo. Save it for large items if more luggage is coming.

If you want to add a fix to the map, it has to be after the Rwy fix or it will affect the fuel number. Anything after the Rwy doesn’t affect fuel number.
INTERNATIONAL FEEDBACK SUBMISSION

Your feedback to the International Feedback Database provides invaluable information on operational issues, facilitation, and local accommodations that can make safer and easier the way for other operators traveling to the same places. Your help is greatly appreciated.

Members are strongly encouraged to include operational, safety and technical enroute observations as well as facilitation information. NBAA reserves the right to edit submissions for clarity and length.

* Field is required

Contact Information

First Name: *
Last Name: *
Company: *
Phone: *
Fax: *
Email: *

Feedback Information

Country: *
City: *
ICAO Identifier: *
Airport Name: *
IATA Region: *
Trip Date: *
Aircraft Type: *
Situation(s): *

Please include operational and technical enroute information as well as facilitation information. This will help in developing positions for international forums.
Toolbox
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• Texting and Flying
  – FOM Limitations
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  – FOM Limitations

• CRM
  – “Charge” Resource Management
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  - FOM Limitations
- CRM
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