

London to Melbourne Air Race – 1934 (*The MacRobertson Trophy Air Race*)

Cruise at 7,500 ft. unless noted. Set Season to Summer. Reset Time to "Day" for each leg

Navigation by Dead Reckoning, NDB's and some VOR's -- Checkpoints are mainly Airports, NDBs or landmarks.

The flights must be flown in the order shown below (or in the reverse direction AFTER the Australia-bound flight is completed).

Report flights as LM-00 through LM-47, or LM-00R thru LM-47R for the return (here, possibly amend flight levels as per semi-circular rules...).

<<< Special Remarks (*with reference to original documents*)>>>

P3D5 users:

LM-00 : SDM NDB missing in the database.

LM-01 : LYX, CGZ NDB's are not in the database.

LM-02 : MOU NDB missing in the database.

LM-03 : SNE NDB missing in the database.

LM-05 : PRA, AME NDB's are not in the database.

LM-06 : PRV NDB missing in the database.

LM-08 : FR NDB missing in the database.

LM-09 : BAB, JYO NDB's missing in the database.

LM-10 : AJF NDB missing in the database.

LM-12 : NR NDB missing in the database.

LM-14 : ZKU, 2BD NDB's are not in the database.

LM-15 : AIN NDB missing in the database.

LM-19 : TRR, NUH NDB's are not in the database.

LM-20 : NUH NDB missing in the database.

LM-21 : FR NDB missing in the database. VIAL is now VEAB.

LM-22 : VIAL is now VEAB.

LM-23 : JS, TK NDB's are not in the database.

London to Melbourne Air Race – 1934 (*The MacRobertson Trophy Air Race*)

LM-27 : MDN NDB missing in the database.

LM-31 : KB NDB missing in the database.

LM-32 : KN, PK NDB's are not in the database.

LM-35 : WARQ is now WAHQ.

LM-36 : WARQ is now WAHQ.

LM-37 : WADW is now WATU.

LM-38 : WADW is now WATU.

LM-40 : HWS NDB missing in the database.

LM-42 : BKT NDB missing in the database.

LM-43 : WTN NDB missing in the database.

LM-47 : ROC NDB missing in the database.

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

1. AMSTERDAM TO MILDENHALL

Note : Runways allocated by the original documentation are Dep. EHAM Rwy 22, Arr. EGUN Rwy 29.

EHAM 22 is the exact spot where the Dutch DC-2 began the historic race, which it won.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 6,500 ft	Apt Elev: -11 ft		
Amsterdam (EHAM), Netherlands To Mildenhall (EGUN), UK	Departure: EHAM, 04-22, 06-24, 18-36 L, C and R Tune ADF to CH NDB (388.5). Set altimeter. Take off, and start climb to 6,500 ft.				
	Enroute: <i>To CH NDB.</i> Turn and fly to NDB.			234	9.2
	<i>To ND NDB (417.0).</i> Overhead CH NDB, turn right and track 283° OB bearing. Maintain heading. When signal fades out, tune ADF to ND NDB and fly to NDB.			283	107.0
	<i>To EGUN.</i> Overhead ND NDB, turn left and track 250° OB bearing from ND NDB. Fly to airport.			250	48.0
	Approach : EGUN, 11-29 (ILS Rwy 29, IMLD 110.15) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Mildenhall Airport, runway in use, and land.				
	Length: 9,193ft	Width: 200 ft	Surface: Asphalt		
Flight No: LM-00	Arrival Airport Elev: 32 ft			Estimated totals for this flight>>>	164.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

2. MILDENHALL TO AUXERRE

Note : Runways allocated by the original documentation are Dep. EGUN Rwy 11, Arr. LFLA Rwy 19.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 32 ft		
Mildenhall (EGUN), UK To Auxerre (LFLA), France	Departure: EGUN, 11-29 Before take off, tune ADF to SND NDB (362.5). Set altimeter. Take off, start climb to 7,500 ft.				
	Enroute:				
	To SND NDB. After take off, turn and fly to NDB.			170	48.0
	To LZD NDB (397.0). Overhead SND NDB, turn left to 166° and fly to NDB.			166	38.0
	To LT NDB (348.5). Overhead LYX NDB, turn left to 135° and fly to NDB.			135	35.0
	To GI NDB (339.0). Overhead LT NDB, turn right and track 140° OB bearing. When signal fades out, tune ADF to GI NDB and fly to NDB.			140	54.0
	To MV NDB (434.0). Overhead GI NDB, turn right and track 165° OB bearing. When signal fades out, tune ADF to MV NDB. When signal is received, fly to NDB.			165	80.0
	To AX NDB (417.0). Overhead MV NDB, turn left and track 150° OB bearing. When signal fades out, tune ADF to AX NDB and fly to NDB.			150	43.0
	To LFLA. Overhead AX NDB, turn right to 182°. Fly to LFLA.			182	4.4
Flight No: LM-01	Approach: LFLA, 01-19 (ILS Rwy 19, AX 109.95) To runway. As soon as airport is in sight, adjust heading, fly to Branches Airport, runway in use, and land.				
	Length: 5,415 ft	Width: 98 ft	Surface: Asphalt		
	Arrival Airport Elev: 523 ft			Estimated totals for this flight>>>	303.0 NM

3. AUXERRE TO MARSEILLE

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

*Note : Runways allocated by the original documentation are Dep. LFLA Rwy 19, Arr. LFML Rwy 14L.
Check weather reports and select appropriate runways.*

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 523 ft		
Auxerre (LFLA), France To Marseille (LFML), France	Departure: LFLA, 01-19 Before take off, tune ADF to AX NDB (417.0). Set altimeter. Take off, start climb to 7,500 ft				
	Enroute: <i>To SN NDB (430.0).</i> Track 163° OB from AX NDB. When AX signal fades out, tune ADF to SN NDB. When signal is received, fly to NDB.			163	97.0
	<i>To BO NDB (299.0).</i> Overhead SN NDB, turn left and track 169° OB bearing. When SN signal fades out, tune ADF to BO NDB and fly to NDB.			169	47.0
	<i>To ORG NDB (328.0).</i> Overhead BO NDB, turn right and track 162° OB bearing. When signal fades out, tune ADF to ORG NDB and fly to NDB.			162	86.0
	<i>To CM NDB (369.0).</i> Overhead ORG NDB, turn right to 170° and fly to NDB.			170	14.4
	<i>To MAR NDB (383.0).</i> Overhead CM NDB, turn left to 156° and fly to NDB.			156	27.0
	To LFML. Overhead MAR NDB, turn left to 131°.			131	4.7
	Approach: LFML, 14L-32R (ILS available both runways), 14R (ILS MCE, 108.30), 32L <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Marseille Provence Airport, runway in use, and land.				
	Length: 14L-32R 11,485 ft 14R-32L 7,784 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-02	Arrival Airport Elev: 70 ft			Estimated totals for this flight>>>	276.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

4. MARSEILLE TO FIGARI

Note : Runways allocated by the original documentation are Dep. LFML Rwy 14L, Arr. LFKF Rwy 05.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 70 ft		
Marseille (LFML), France To Figari / Sud Corse (LFKF), France	Departure: LFML, 14L-32R, 14R-32L Before take off, tune ADF to OB NDB (395.0). Set altimeter. Take off, start climb to 7,500 ft				
	Enroute: <i>To OB NDB (395.0).</i> After take off, turn and fly to NDB.			120	23.0
	<i>To TLN NDB (322.0).</i> Overhead OB NDB, turn left to 117° and fly to NDB.			117	24.0
	<i>To IS NDB (341.0).</i> Overhead TLN NDB, turn right and track 119° OB bearing from TLN. When signal fades out, tune ADF to IS NDB and fly to NDB.			119	128.0
	<i>To WP1 (Senetosa Lighthouse).</i> Overhead CT NDB, turn right to 156° and fly to NDB.			156	22.0
	<i>To WP2 (Punta di Capineru).</i> Waypoint on the left side of the entry to Figari Bay.			116	12.6
	<i>To LFKF.</i> Overhead WP1, turn left to 41°. Fly to the airport.			041	3.7
	Approach: LFKF, 05-23(ILS Rwy 23, GR 110,50) <i>To runway.</i> As soon as airport is in sight, adjust heading and and fly to Figari Sud Corse Airport, runway in use, and land.				
	Length: 8,132 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-03	Arrival Airport Elev: 87 ft			Estimated totals for this flight>>>	214.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

5. FIGARI TO ROME

Note : Runways allocated by the original documentation are Dep. LFKF Rwy 05, Arr. LIRF Rwy 07.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 87 ft		
Figari (LFKF), France To Rome (LIRF), Italy	Departure: LFKF, 05-23 Before take off, tune ADF to FA NDB (325.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To FA NDB.</i> Turn and fly to FA NDB. <i>Towards OST NDB (321.0).</i> Overhead FA NDB, turn right and track 081° OB bearing from FA NDB. Maintain hdg. No Nav aids until across open water, 70 NM or so from Rome. That will be approx. 70 NM of Dead Reckoning flight. Turn on ADF Morse Ident. Fly towards NDB.			047 081	9.2 134.0
	Approach: LIRF 07-25 (ILS Rwy 25, FEE 109.70), 16R-34L, 16C-34C, 16L-34R (ILS all 16-34) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Fuimicino Airport, runway in use, and land.			156	0.3
	Length: 07-25 10,842 ft, 16R-34L 12,806 ft 16C-34C 11,820 ft 16L-34R 12,806 ft	Width: 197 ft 148 ft 197ft	Surface: Asphalt		
Flight No: LM-04	Arrival Airport Elev: 14 ft			Estimated totals for this flight>>>	144.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

6. ROME TO BRINDISI

Note : Runways allocated by the original documentation are Dep. LIRF Rwy 16L, Arr. LIBR Rwy 14.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 14 ft		
Rome (LIRF), Italy To Brindisi (LIBR), Italy	Departure: LIRF, 07-25, 16R-34L, 16C-34C, 16L-34R Before take off, tune ADF to FRS NDB (316.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute:				
	<i>To FRS NDB (371.0).</i> After take off, turn to 098° and fly to NDB.			098	48.0
	<i>To TEA NDB (316.0).</i> Overhead FRS NDB, turn right to 121° and fly to NDB.			121	37.0
	<i>To FOG NDB (340.0).</i> Overhead TEA NDB, turn left and track 080° OB bearing from TEA. After +/- 10 minutes flight, tune ADF to FOG NDB and fly to NDB.			080	71.0
	<i>To WP1.</i> Overhead FOG NDB, maintain heading and fly to coastline. Waypoint reached when overhead the coastline			080	19.1
	<i>To BPL NDB (401.0).</i> Overhead WP1, turn right to 120° and fly to NDB.			120	38.0
	<i>Towards BRD NDB (363.5).</i> Overhead BPL NDB, turn left and track 111° OB bearing from BPL. Tune ADF to BRD NDB and fly towards NDB.			111	64.0
Flight No: LM-05	Approach: LIBR 05-23, 13-31 (ILS Rwy 31, IBN 109.50) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Casale Airport, runway in use, and land.				
	Length: 05-23 5,891 ft, 13-31 9,997 ft	Width: 148 ft	Surface: Asphalt Concrete		
	Arrival Airport Elev: 46 ft			Estimated totals for this flight>>>	278.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

7. BRINDISI TO ATHENS

Note : Runways allocated by the original documentation are Dep. LIBR Rwy 14, Arr. LGAV Rwy 03R.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 9,500 ft	Apt Elev: 46 ft		
Brindisi (LIBR), Italy To Athens (LGAV), Greece	Departure: LIBR 05-23, 13-31 Before take off, tune ADF to BRD NDB (363.5). Set altimeter. Take off and start climb to 9,500 ft.				
	Enroute: <i>To BRD NDB.</i> After take off, turn and fly to NDB.			136	4.3
	<i>To KEK NDB (403.0).</i> Overhead BRD NDB, turn left and track 120° OB bearing from BRD over open water. (May be 40 NM or more interval between stations-Fly Dead Reckoning).			120	107.0
	<i>To PAK NDB (353.0).</i> Overhead KEK NDB, turn right and track 131° OB bearing from BRD. When signal fades out, maintain heading, tune ADF to PAK NDB and fly to NDB.			131	56.0
	<i>To AML NDB (367.0).</i> Overhead PRV NDB, turn right and track 154° OB bearing from PRV. After some minutes of flight, maintain heading, tune ADF to AML NDB and fly to NDB.			154	74.0
	<i>To KOR NDB (392.0).</i> Overhead AML NDB, turn right and track 078° OB bearing from AML. After +/- 18 minutes flight, tune ADF to KOR NDB and fly to NDB.			078	76.0
	<i>To WP1 (Fleves Island).</i> Overhead KOR NDB, turn left to 099°.			099	40.0
	<i>To LGAV.</i> Overhead WP1, turn left to 036°. Fly to the airport.			036	13.2
	Approach: LGAV 03L-21R, 03R-21L (ILS all runways) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Elephterios Venizelos Int'l, runway in use, and land.				
	Length: 03L-21R 12,469 ft, 03R-21L 13,126 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-06	Arrival Airport Elev: 308 ft			Estimated totals for this flight>>>	371.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

8. ATHENS TO RODOS (RHODES)

*Note : Runways allocated by the original documentation are Dep. LGAV Rwy 15L, Arr. LGRP Rwy 07.
Check weather reports and select appropriate runways.*

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 308ft		
Athens (LGAV), Greece To Rodos (Rhodes) (LGRP), Greece	Departure: LGAV 03L-21R, 03R-21L Before take off, tune ADF to SPA VOR/DME (117.50) and set OBS to 119°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To SYR NDB (417.0).</i> Turn and track 117° OB from SPA. SYR NDB signal should be received after +/- 15 minutes. Fly to NDB.			117	57.2
	<i>To MKO NDB (401.0).</i> Overhead SYR NDB, turn right to 083° and fly to NDB.			083	19.0
	<i>To LRO NDB (419.0).</i> Overhead MKO NDB, turn right and track 097° OB bearing from MKO. When signal fades out, maintain heading, tune ADF to LRO NDB and fly to NDB.			097	71.0
	<i>To KOS NDB (311.0).</i> Overhead LRO NDB, turn right to 145° and fly to NDB.			145	27.0
	<i>To ROS NDB (339.0).</i> Overhead KOS NDB, turn to 109°. After +/- 16 minutes flight, you should be close to the southern tip of Seski Island, the small Kouloundros Island behind.			109	55.0
	Approach: LGRP 07-25 (ILS Rwy 25, IRDS 110.30) <i>To runway.</i> Overhead ROS NDB, adjust heading, fly to Diagoras Airport, runway in use, and land.			238	1.7
	Length: 10,832 ft	Width: 148 ft	Surface: Concrete		
Flight No: LM-07	Arrival Airport Elev: 19 ft			Estimated totals for this flight>>>	
					231.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

9. RODOS (RHODES) TO LARNACA

Note : Runways allocated by the original documentation are Dep. LGRP Rwy 07, Arr. LCLK Rwy 04
Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 19 ft		
Rodod (Rhodes) (LGRP), Greece To Larnaca (LCLK), Cyprus	Departure: LGRP 06-24 Before take off, tune ADF to ROS NDB (339.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To ROS NDB.</i> After take off, turn and fly to NDB.			058	1.7
	<i>To KZO NDB (416.0).</i> Overhead ROS NDB, turn right and track 098° OB bearing from ROS. When signal fades out, maintain heading, tune ADF to KZO NDB and fly to NDB.			098	72.0
	<i>To WP1 (Gelidonya Feneri / Lighthouse).</i> Overhead KZO NDB, turn left to 078° and fly to the lighthouse.			078	41.0
	<i>To PHA NDB (328.0).</i> Overhead the lighthouse, turn right to 126°. Watch hdg. No Nav aids above open water, about 61 NM of Dead Reckoning before receiving next station. Maintain heading, tune ADF to PHA NDB and fly to NDB as soon as signal is received.			126	135.0
	<i>To LCA NDB (432.0).</i> Overhead PHA NDB, turn left and track 078° OB bearing from PHA. After +/- 10 minutes flight, tune ADF to LCA NDB and fly to NDB.			078	54.0
	<i>To LCLK.</i> Overhead LCA NDB, turn left to 042°.			042	5.1
	Approach: LCLK 04-22 (ILS Rwy 22, ILC 110.30) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Larnaca Int'l Airport, runway in use, and land.				
	Length: 9,824 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-08	Arrival Airport Elev: 11 ft				308.0 NM
	Estimated totals for this flight>>>				

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

10. LARNACA TO AMMAN

*Note : Runways allocated by the original documentation are Dep. LCLK Rwy 22, Arr. OJAI Rwy 26R.
Check weather reports and select appropriate runways.*

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 11 ft		
Larnaca (LCLK), Cyprus To Amman (OJAI), Jordan	Departure: LCLK 04-22 Before take off, tune ADF to LCA NDB (432.0). Set altimeter. Take off and start climb to 7,5xx ft.				
	Enroute: <i>To LCA NDB.</i> After take off, turn to 222° and fly to LCA NDB.			222	5.1
	<i>To BOD NDB (351.0).</i> Overhead LCA NDB, turn left to track 115° OB bearing from LCA NDB (ADF will point to 295°) over open water. After +/- 30 minutes flight, or when signal fades out, maintain heading, tune ADF to BOD NDB, and fly to NDB when signal is received.			115	110.0
	<i>To WP1.</i> Overhead BAB NDB, turn right and track 170° OB bearing from BAB, flying towards Lake Tiberias (aka Sea of Galilee). After +/- 25 minutes flight, you will be flying overhead Rosh-Pina Airport (LLIB), which is your waypoint.			170	55.0
	<i>To MDB NDB (399.0).</i> Overhead LLIB, turn left to 165°. Maintain heading, tune ADF to MDB NDB and fly to NDB.			165	78.0
	Approach: OJAI 08L-26R (ILS both runways), 08R-26L (ILS Rwy 26L, IQA 110.90) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Queen Alia Int'l Airport, runway in use, and land.			079	7.3
	Length: 08L-26R 12,020 ft 08R-26L 11,996 ft	Width: 200 ft	Surface: Asphalt		
Flight No: LM-09	Arrival Airport Elev: 2,397 ft			Estimated totals for this flight>>>	256.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

11. AMMAN TO AL JOUF

Note : Runways allocated by the original documentation are Dep. OJAI Rwy 08R, Arr. OESK Rwy 10
Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 2,397 ft		
Amman (OJAI), Jordan To Al Juf (OESK), Saudi Arabia	Departure: OJAI 08L-26R, 08R-26L Before take off, tune ADF to QA NDB (410.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To QA NDB.</i> After take off, turn and fly to NDB.			080	5.2
	<i>To GRY TACAN (94X / 114.70).</i> Overhead QA NDB, turn right and track 103° OB bearing from QA NDB, or 103° IB to GRY, and fly to the TACAN.			103	64.0
	<i>To AJF TACAN (125X / 117.80).</i> Overhead Guriat, turn right to 119°. Maintain heading, tune ADF to AJF NDB. Watch hdg; no Nav aids across Desert, about 100 NM of Dead Reckoning between stations. Turn on ADF Morse Ident. When signal is received, fly to NDB.			119	174.0
	Approach: OESK 10-28 (ILS Rwy 28, IAJF 109.90) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Al Juf Airport, runway in use, and land.			096	1.5
	Length: 12,003 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-10	Arrival Airport Elev: 2,261 ft			Estimated totals for this flight>>>	
					244.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

12. AL JOUF TO RAFHA

*Note : Runways allocated by the original documentation are Dep. OESK Rwy 10, Arr. OERF Rwy 11
Check weather reports and select appropriate runways.*

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 2,261 ft		
Al Juf (OESK), Saudi Arabia To Rafha (OERF), Saudi Arabia	Departure: OESK 10-28 Before take off, tune ADF to RAF VOR/DME (116.80) and set OBS to 088°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: To RAF VOR/DME (116.80). After take off, maintain runway heading until RAF signal is received. Watch heading. No Nav aids across Desert. Turn on Nav Morse Ident. When VOR signal is received, fly towards VOR.			088	177.0
	Approach: OERF 11-29 (ILS Rwy 28, IRAF 111.30) To runway. As soon as airport is in sight, adjust heading, fly to Rafha Airport, runway in use, and land.				
	Length: 9,839 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-11	Arrival Airport Elev: 1,474 ft Estimated totals for this flight>>>				177.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

13. RAFHA TO KUWAIT

Note : Runways allocated by the original documentation are Dep. OERF Rwy 11, Arr. OKBK Rwy 15R

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 1,474ft		
Rafha (OERF), Saudi Arabia To Kuwait (OKBK), Kuwait	Departure: OERF 11-29 Before take off, tune NAV1 to KUA VOR/DME (115.50) and set OBS to 091°. Set altimeter. Take off and start climb to 7,500ft.				
	Enroute: <i>To KUA VOR (115.50).</i> After take off, maintain runway heading until KUA signal is received. No Nav aids across Desert. Turn on Nav Morse Ident. When VOR signal is received, fly towards VOR.			091	236.0
	Approach: OKBK 15R-33L, 15L-33R, (ILS all runways) <i>To runway.</i> As soon as OKBK airport is in sight, adjust heading, fly to Kuwait Int'l Airport, runway in use, and land.				
	Length: 15R-33L 11,183 ft 15L-33R 11,509 ft	Width: 148 ft	Surface: Concrete Asphalt		
Flight No: LM-12	Arrival Airport Elev: 204 ft			Estimated totals for this flight>>>	236.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

14. KUWAIT TO DAHRAN

Note : Runways allocated by the original documentation are Dep. OKBK Rwy 14L, Arr. OEDR Rwy 16R.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 204 ft		
Kuwait (OKBK), Kuwait To Dhahran (OEDR), Saudi Arabia	Departure: OKBK 15R-33L, 15L-33R Before take off, tune ADF to TJ NDB (382.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To TJ NDB.</i> After take off, turn and track 149° IB to TJ NDB. Fly to NDB.			149	93.0
	<i>To RT NDB (286.0).</i> Overhead TJ NDB, turn left to 132°. Tune ADF to RT NDB and fly to NDB as soon as signal is received.			132	96.0
	<i>To OERT.</i> Overhead RT NDB (OERT), turn right to 164°.			164	27
	Approach: OEDR 16R-34L, 16L-34R, (ILS all runways) – TACAN DHA 119X (117.20) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Dhahran Int'l Airport, runway in use, and land.				
	Length: 16R-34L 12,042 ft 16L-34R 11,844 ft	Width: 148 ft	Surface: Concrete		
Flight No: LM-13	Arrival Airport Elev: 84 ft			Estimated totals for this flight>>>	216.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

15. DAHRAN TO ABU DHABI

Note : Runways allocated by the original documentation are Dep. OEDR Rwy 16L, Arr. OMAA Rwy 13.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 84 ft		
Dhahran (OEDR), Saudi Arabia To Abu Dhabi (OMAA), U.A.E.	Departure: OEDR 16R-34L, 16L-34R Before take off, tune ADF to SI NDB (343.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To SI NDB.</i> After take off, turn and track 130° inbound to SI NDB as soon as SI NDB signal is received, and fly to NDB.			130	33.0
	<i>To WK NDB (323.0).</i> Overhead SI NDB, turn to 126° OB from SI NDB. Maintain heading until WK NDB is received. Adjust heading and fly to NDB.			126	69.0
	<i>To OMAA.</i> Overhead WK NDB, turn left to 102°. Tune NAV1 to ADV VOR (114.25, OBS 102°) and track 102° IB towards ADV VOR.			102	172
	Approach: OMAA 13-31 (ILS at all runways) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Abu Dhabi Int'l Airport, runway in use, and land.				
	Length: 13R-31L 13,482 ft 13L-31R 13,463 ft	Width: 197 ft	Surface: Asphalt		
Flight No: LM-14	Arrival Airport Elev: 82 ft			Estimated totals for this flight>>>	274.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

16. ABU DHABI TO MUSCAT

*Note : Runways allocated by the original documentation are Dep. OMAA Rwy 13, Arr. OOMS Rwy 08
Check weather reports and select appropriate runways.*

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 82 ft		
Abu Dhabi (OMAA), U.A.E. To Muscat (OOMS), Oman	Departure: OMAA 13-31 Before take off, tune NAV1 to ALN VOR/DME (112.60) and set OBS to 099°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To ALN VOR.</i> Turn and intercept 99° IB bearing to ALN VOR. Fly to VOR. <i>To MCT VOR/DME (114.50).</i> Overhead ALN VOR, turn right to 103°. Tune NAV1 to MCT VOR/DME (114.50) and set OBS to 103. Fly to VOR.			099 103	53.0 151.0
	Approach: OOMS 08L-26R (ILS both runways) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Muscat Int'l Airport, runway in use, and land.				
	Length: 08L-26R 13,118 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-15	Arrival Airport Elev: 49 ft Estimated totals for this flight>>>				205.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

17. MUSCAT TO JIWANI

Note : Runways allocated by the original documentation are Dep. OOMS Rwy 08, Arr. OPJI Rwy 03

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 49 ft		
Muscat (OOMS), Oman To Jiwani (OPJI), Pakistan	Departure: OOMS 08L-26R Before take off, tune NAV1 to CBH VOR/DME (115.60) and set OBS to 045°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To CBH VOR.</i> After take off, turn to 045°; As soon as CBM signal is received, track 045° IB to CBM VOR, and fly to VOR <i>To JI NDB (330.0).</i> Overhead CBM, turn east to 105°. Tune ADF to JI NDB (330.0), and fly to JI NDB.			045 105	161.0 78.0
	Approach: OPJI 03-21 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Jiwani Airport, runway in use, and land.			125	0.4
	Length: 5,301 ft	Width: 151 ft	Surface: Clay		
	Arrival Airport Elev: 184 ft				
Flight No: LM-16	Estimated totals for this flight>>>				240.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

18. JIWANI TO KARACHI

Note : Runways allocated by the original documentation are Dep. OPJI Rwy 03, Arr. OPKC Rwy 07R

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 184 ft		
Jiwani (OPJI), Pakistan To Karachi (OPKC), Pakistan	Departure: Before take off, tune ADF to GD NDB (303.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To GD NDB.</i> Turn and track 070 IB to GD. Fly to NDB.			070	30.0
	<i>To PI NDB (400.0).</i> Overhead GD NDB, turn right to 085°. After 15 minutes flight from GD, tune ADF to PI NDB, then fly to NDB.			085	55.0
	<i>To OR NDB (380.0).</i> Overhead PI NDB, turn right to 085°. When PI NDB signal fades out, tune ADF to OR NDB and fly to NDB.			090	67.0
	<i>To KA NDB (244.0).</i> Overhead OR NDB, turn right to 102°. When OR NDB signal fades out, tune ADF to KA NDB and fly to NDB.			102	116.0
	<i>To KC NDB (244.0).</i> Overhead KA NDB, turn right to 077°. Fly to NDB.			077	28.0
	Approach: OPKC 07L-25R (ILS Rwy 25R IKC, 110.10), 07R-25L (ILS Rwy 25L IQA, 109.70) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Jinnah Int'l Airport, runway in use, and land.				
	Length: 07L-25R 10,489 07R-25L 11,144	Width: 151 ft 148 ft	Surface: Concrete Concrete		
Flight No: LM-17	Arrival Airport Elev: 100 ft			Estimated totals for this flight>>>	
					296.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

19. KARACHI TO JODHPUR

Note : Runways allocated by the original documentation are Dep. OPKC Rwy 07L, Arr. VIJO Rwy 05

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 100 ft		
Karachi (OPKC), Pakistan To Jodhpur (VIJO), India	Departure: OPKC 06-24, 07L-25R, 07R-25L Before take off, tune ADF to KC NDB (271.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To KD NDB (223.0).</i> After take off, turn and intercept 069° OB from KC NDB. Turn and track 069° OB from KO NDB. At your convenience (both NDB's have 75 NM range...), tune ADF to KD NDB and fly to NDB. <i>To KE NDB (410.0).</i> Turn right and track 080° OB from KD NDB. At your convenience (both NDB's have 75 NM range...), tune ADF to KE NDB and fly to NDB. <i>To JJO VOR/DME (112.30).</i> Overhead KE, tune NAV1 to JJO VOR/DME and track 075° bearing and fly to VOR.			069	70.0
				080	77.0
				075	182.0
	Approach: VIJO 05-23 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Jodhpur AB, runway in use, and land.			003	1.4
	Length: 9,087 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-18	Arrival Airport Elev: 710 ft			Estimated totals for this flight>>>	330.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

20. JODHPUR TO DELHI

Note : Runways allocated by the original documentation are Dep. VIJO Rwy 05, Arr. VIDP Rwy 28

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 710 ft		
Jodhpur (VIJO), India To Delhi (VIDP), India	Departure: VIJO 05-23 Before take off, tune NAV1 to JJP VOR/DME (112.90) and set OBS to 076°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To JJP VOR/DME (112.90).</i> After take off, turn and track 076° IB to JJP. Fly to VOR. <i>To PL NDB (303.0).</i> Overhead JJP, turn left to 034° OB from JJP. After +/- 25 minutes flight, tune ADF tp PL NDB and fly to NDB.			076	154.0
	Approach: VIDP 09-27 (ILS Rwy 27 DLH 110.50), 10-28 (ILS both runways), <i>To runway.</i> Overhead PL NDB, airport in sight, adjust heading, fly to Indira Ghandi Int'l Airport, runway in use, and land.			034	126.0
	Length: 09-27 9,233ft 10-28 12,503 ft 11-29 14,528 ft	Width: 148 ft 148 ft 197 ft	Surface: Asphalt	289	4.9
Flight No: LM-19	Arrival Airport Elev: 777 ft			Estimated totals for this flight>>>	285.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

21. DELHI TO GWALIOR

*Note : Runways allocated by the original documentation are Dep. VIDP Rwy 10, Arr. VIGR Rwy 24
Check weather reports and select appropriate runways.*

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 6,500 ft	Apt Elev: 777 ft		
Dehli (VIDP), India To Gwalior (VIGR), India	Departure: VIDP 09-27, 10-28, 11-29 Before take off, tune ADF to AG NDB (249.5). Set altimeter. Take off and start climb to 6,500 ft.				
	Enroute: <i>To AG NDB (249.5).</i> After take off, turn and track 151° IB to AG. Fly to NDB.			151	96.0
	<i>To GWA VOR/DME (112.80).</i> Overhead AG NDB, turn right and track 164° OB from AG NDB, or to GWA VOR, at your convenience.			164	53.0
	Approach: VIGR 06L-24R, 06R-24L <i>To runway.</i> As soon as VIGR airport is in sight, adjust heading, fly to Maharajour AB, runway in use, and land.			165	0.3
	Length: 06L-24R 8,971 ft 06R-24L 8,952 ft	Width: 148 ft	Surface: Concrete		
Flight No: LM-20	Arrival Airport Elev: 617 ft			Estimated totals for this flight>>>	150.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

22. GWALIOR TO ALLAHABAD

Note : Runways allocated by the original documentation are Dep. VIGR Rwy 06, Arr. VIAL Rwy 12

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 617 ft		
Gwalior (VIGR), India To Allahabad (VEAB), India	Departure: VIGR 06-24 Before take off, tune NAV1 to GWA VOR/DME (112.80) and set OBS to 085°. Tune ADF to KA NDB (292.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To KA NDB.</i> After takeoff, turn and track 085° OB from GWA, and track 086° OB until KA NDB signal is received, Turn on ADF Morse Ident. Fly to NDB.			085	117.0
	<i>To WP1 (VIBR / Fursatganj Airport).</i> Overhead KA NDB, turn to 100°. When KA signal fades out, tune ADF to AP NDB (328.0).			100	54.0
	<i>To AP NDB (328.0).</i> Overhead VIRB, turn to 159°. Fly to NDB.			159	50.0
	Approach: VEAB 12-30 <i>To runway.</i> Overhead AP NDB, turn left to 125°. As soon as airport is in sight, adjust heading, fly to Allahabad Airport, runway in use, and land.			125	2.4
	Length: 12-30 7,617 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-21	Arrival Airport Elev: 321 ft			Estimated totals for this flight>>>	
					224.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

23. ALLAHABAD TO RANCHI

Note : Runways allocated by the original documentation are Dep. VIAL Rwy 06, Arr. VERC Rwy 13

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 321 ft		
Allahabad (VEAB), India To Ranchi (VERC), India	Departure: VEAB 12-30 Before take off, tune ADF to AP NDB (328.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To BN NDB (222.0).</i> After take off, turn and track 090° OB from AP NDB. This NDB has sufficient range to bring you to BN. However, at your convenience, or let us say after 15/20 minutes flight, tune ADF to BN NDB and fly to NDB when signal is received. <i>To RC NDB (285.0).</i> Overhead BN NDB, turn right and track 133° OB from BN NDB. When signal fades out, maintain hdg over desert and fly Dead Reckoning. Tune ADF to RC NDB. Turn on ADF Morse Ident. Fly to NDB when signal is received. Alternatively, you can tune NAV1 to RRC VOR/DME (116.90) for heading and distance checkings.			090	62.0
	Approach: VERC 13-31 (ILS Rwy 31, IRAN 110.50) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Ranchi Airport, runway in use, and land.			133	186.0
	Length: 8,891 ft Width: 148 ft Surface: Asphalt			194	0.2
	Flight No: LM-22 Arrival Airport Elev: 2,148 ft Estimated totals for this flight>>>				248.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

24. RANCHI TO CALCUTTA

*Note : Runways allocated by the original documentation are Dep. VERC Rwy 13, Arr. VECC Rwy 19L
Check weather reports and select appropriate runways.*

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 2,148 ft		
Ranchi (VERC), India To Calcutta (VECC), India	Departure: VERC 13-31 Before take off, tune ADF to RC NDB (285.0) and NAV1 to JJS VOR/DME (115.40) and set OBS to 123°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To JJS VOR (400.0).</i> After take off, turn and track 123° OB from RC NDB. Monitor NAV1, and fly to VOR. <i>To DU NDB (385.0).</i> Overhead JJS VOR, turn left to 092° and fly to NDB.			123 092	56.0 126.0
	Approach: VECC 01L-19R (ILS 19R, IOKL 111.30), 01R-19L (ILS both runways) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Chandra Bose Int'l Airport, runway in use, and land.			187	5.2
	Length: 01L-19R 10,768 ft 01R-19L 11,863 ft	Width: 148 ft	Surface: Concrete Asphalt		
Flight No: LM-23	Arrival Airport Elev: 23 ft Estimated totals for this flight>>>				188.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

25. CALCUTTA TO COX'S BAZAR

Note : Runways allocated by the original documentation are Dep. VECC Rwy 01L, Arr. VGCB Rwy 17

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 23ft		
Calcutta (VECC), India To Cox's Bazar (VGCB), Bangladesh	Departure: VECC 01L-19R, 01R-19L Before take off, tune ADF to DU NDB (385.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To DU NDB.</i> Turn and fly to NDB.			007	5.2
	<i>To BL NDB (368.0).</i> Overhead DU NDB, turn and track 088° OB from NDB. When signal fades out, tune ADF to BL NDB. Fly to NDB when signal is received.			088	102.0
	<i>To EG NDB (287.0).</i> Overhead BL NDB, turn and track 111° OB from NDB. When reaching Meghna River mouth, or free water, tune ADF to EG NDB and fly to NDB.			111	90.0
	<i>To CB NDB (396.0).</i> Overhead EG NDB, turn right and track 171° OB from NDB. Tune ADF to CB NDB and fly towards NDB. Follow coastline south.			171	49.0
	Approach: VGCB 17-35 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Cox's Bazar Airport, runway in use, and land.			197	0.2
	Length: 9,000 ft	Width: 125 ft	Surface: Asphalt		
Flight No: LM-24	Arrival Airport Elev: 12 ft				246.0 NM
	Estimated totals for this flight>>>				

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

26. COX'S BAZAR TO THANDWE

Note : Runways allocated by the original documentation are Dep. VGCB Rwy 17, Arr. VYTD Rwy 20.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 12 ft		
Cox's Bazar (VGCB), Bangladesh To Thandwe (VYTD), Myanmar	Departure: VGCB 17-35 Before take off, tune ADF to CB NDB (396.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To SW NDB (216.0).</i> After take off, turn and track 147° OB from CB NDB. Start timer. After +/-30 minutes flight, tune ADF to SW NDB and fly to NDB. Alternatively, follow coastline until SW NDB signal is received.			147	94.0
	<i>To KP NDB (250.0).</i> Overhead SW NDB, turn left to 140°. Tune ADF to KP NDB and fly to NDB.			140	56.0
	<i>To TD NDB (270.0).</i> Overhead KP NDB, turn right to 144°. Tune ADF to TD NDB, and fly towards NDB.			144	73.0
	Approach: VYTD 02-20 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Mazin Airport, runway in use, and land.				
	Length: 8,029 ft	Width: 98 ft	Surface: Asphalt		
Flight No: LM-25	Arrival Airport Elev: 47 ft	Estimated totals for this flight>>>			223.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

27. THANDWE TO YANGOON

Note : Runways allocated by the original documentation are Dep. VYTD Rwy 20, Arr. VYYY Rwy 03.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 47 ft		
Thandwe (VYTD), Myanmar To Yangon (VYYY), Myanmar	Departure: VYTD 02-20 Before take off, tune ADF to TD NDB (270.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To PTN NDB (415.0).</i> After take off, turn and track 165° OB from TD NDB. Start timer. After 20 minutes flight, tune ADF to PTN NDB. Fly to NDB.			165	102.0
	<i>To MDS NDB (397.0).</i> Overhead PTN NDB, turn left and track 088° OB from NDB. Reset timer. After 18 minutes flight, tune ADF to MDS NDB. Fly to NDB.			088	76.0
	Approach: VYYY 03-21 (ILS Rwy 21, IYGN 109.90) <i>To runway.</i> Overhead MDS NDB, turn left to 035°. As soon as airport is in sight, adjust heading, fly to Yangon Int'l Airport, runway in use, and land.			035	2.8
	Length: 11,232 ft	Width: 200 ft	Surface: Concrete		
Flight No: LM-26	Arrival Airport Elev: 110 ft			Estimated totals for this flight>>>	182.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

28. YANGOON TO TAK

Note : Runways allocated by the original documentation are Dep. VYYY Rwy 03, Arr. VTPM Rwy 09.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 110 ft		
Yangoon (VYYY), Myanmar To Tak (VTPM), Thailand	Departure: VYYY 03-21 Before take off, tune ADF to MDS NDB (397.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To PA NDB (365.0).</i> After take off, turn and track 090° OB from MDS NDB. When reaching the coastline, tune ADF to PA NDB. Fly to NDB. <i>To MS NDB (316.0).</i> Overhead PA NDB, turn right and track 104° OB from PA NDB. Start timer. After +/- 7 minutes flight, tune ADF to MS NDB (316.0). Fly to NDB.			090	90.0
	Approach: VTPM 09-27 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Mae Sot Aero Airport, runway in use, and land.			104	51.0
				122	0.2
	Length: 4,958 ft	Width: 98 ft	Surface: Asphalt		
Flight No: LM-27	Arrival Airport Elev: 690 ft			Estimated totals for this flight>>>	141.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

29. TAK TO BANGKOK

Note : Runways allocated by the original documentation are Dep. VTPM Rwy 09, Arr. VTBD Rwy 21R.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 690 ft		
Tak (VTPM), Thailand To Bangkok (VTBD), Thailand	Departure: VTPM 09-27 Before take off, tune ADF to MS NDB (316.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To TL NDB (350.0).</i> After take off, turn and track 131° OB from MS NDB. After +/- 30 minutes flight, tune ADF to TL NDB. Fly to NDB.			131	133.0
	<i>To LB NDB (280.0).</i> Overhead TL NDB, turn right to 140° and fly to LB NDB.			140	32.0
	<i>To KK NDB (276.0).</i> Overhead LB NDB, turn right and track 183° OB from NDB. Start timer. After +/- 13 minutes flight, tune ADF to KK NDB. Fly to NDB.			183	56.0
	Approach: VTBD 03L-21R (ILS both sides), 03R-21L (ILS Rwy 21L, IDMG 110.30) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Bangkok Int'l Airport, runway in use, and land.			210	1.4
	Length: 03L-21R 12,185 ft 03T-21L 11,526 ft	Width: 197 ft 148 ft	Surface: Asphalt		
Flight No: LM-28	Arrival Airport Elev: 9 ft			Estimated totals for this flight>>>	222.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

30. BANGKOK TO PRACHUAP

Note : Runways allocated by the original documentation are Dep. VTBD Rwy 21R, Arr. VTBP Rwy 18.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 6,500 ft	Apt Elev: 9 ft		
Bangkok (VTBD), Thailand To Prachuap (VTBP), Thailand	Departure: VTBD 03L-21R, 03R-21L Before take off, tune ADF to KK NDB (276.0). Set altimeter. Take off and start climb to 6,500 ft.				
	Enroute: <i>To HN NDB (213.0).</i> After take off, turn and track 208° OB from KK NDB. When reaching coastline, tune ADF to HN NDB. <i>Either</i> Follow coastline south to HN NDB at Hua Hin Airport. <i>Or fly to HN NDB over the water</i>			207	88.0
	<i>To PCK NDB (320.0).</i> Overhead HN NDB, turn left and track 190° OB from HN NDB. Start timer. 8 minutes after passing HN, tune ADF to PCK NDB and fly towards NDB.			208	87.0
	Approach: VTBP 08-26 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Prachuap Khiri Airport, runway in use, and land.			190	52.0
	Length: 08-26 6,562 ft 18-36 3,445 ft	Width: 131 ft	Surface: Asphalt		
Flight No: LM-29	Arrival Airport Elev: 17 ft			Estimated totals for this flight>>>	138.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

31. PRACHUAP TO NAKHON SI THAMMARAT

Note : Runways allocated by the original documentation are Dep. VTBP Rwy 18, Arr. VTSF Rwy 18.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 6,500 ft	Apt Elev: 17 ft		
Prachuap (VTBP), Thailand To Nakhon Si Thammarat (VTSF), Thailand	Departure: VTBP 08-26 Before take off, tune ADF to CP NDB (279.0). Set altimeter. Take off and start climb to 6,500 ft.				
	Enroute: <i>To CP NDB (279.0).</i> After take off, turn and track 203° IB to CP NDB. Fly to NDB.			203	69.0
	<i>To SR NDB (338.0).</i> Turn and track 188° OB from CP NDB. Start timer. After 20 minutes flight, tune ADF to SR NDB and fly to NDB.			188	96.0
	<i>To NK NDB (289.0).</i> Overhead SR NDB, turn left to 127°. Start Climb to 7,500 ft. Start timer. Tune ADF to NK NDB and fly to NDB.			127	59.0
	At +/- 12 minutes from SR NDB, begin 350 fpm descent.				
	Approach: VTSF 01-19 (ILS Rwy 19, INKS 105.70) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Nakhon Si Thammarat Airport, runway in use, and land.			151	0.5
	Length: 6,947 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-30	Arrival Airport Elev: 13 ft Estimated totals for this flight>>>				225.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

32. NAKHON SI THAMMARAT TO KUALA TERRENGGANU

Note : Runways allocated by the original documentation are Dep. VTSF Rwy 18, Arr. WMKN Rwy 22.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 13 ft		
Nakhon Si Thammarat (VTSF), Thailand To Kuala Terengganu (WMKN), Malaysia	Departure: VTSF 01-19 Before take off, tune ADF to SK NDB (410.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To SK NDB.</i> After take off, turn to 154°. Once levelled at cruise altitude, Tune ADF to SK NDB. Fly to NDB. (or follow coastline south until SK signal is received). <i>To PT NDB (201.0).</i> Overhead SK NDB, turn left to 127°. Tune ADF to PT NDB and fly to navaid (or follow coastline south). <i>To NT NDB (383.0).</i> Overhead PT NDB, turn to 114°. Tune ADF to NT NDB and fly to NDB (or follow coastline south). <i>To GK NDB (520.0).</i> Overhead NT NDB, turn to 135°. Tune ADF to GK NDB and fly to NDB (or follow coastline south). <i>To WMKN Airport.</i> Overhead GK NDB, turn right to 124° and track 124° OB from GK NDB. Start timer. Fly to WMKN.			154 127 114 135 124	90.0 40.0 39.0 62.0 44.0
	Approach: WMKN 04-22 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Sultan Mahmud Airport, runway in use, and land.				
	Length: 11,445 ft	Width: 148 ft	Surface: Asphalt		
	Flight No: LM-31 Arrival Airport Elev: 20 ft Estimated totals for this flight>>>				276.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

33. KUALA TERRENGGANU TO SINGAPORE

Note : Runways allocated by the original documentation are Dep. WMKN Rwy 22, Arr. WSSL Rwy 21.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 20 ft		
Kuala Terengganu (WMKN), Malaysia To Singapore (WSSL), Republic of Singapore	Departure: WMKN 04-22 Before take off, tune NAV1 VKE VOR/DME (117.10) and set OBS to 159°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To VKE VOR/DME (117.10).</i> After take off, turn to 159°. Track 159° IB to VOR and fly to VKE.			159	54.0
	<i>To VPK VOR/DME (115.60).</i> Overhead VKE, turn left to 180° and start climb to 7,500 ft. Tune NAV1 to VPK VOR and fly to VOR.			180	70.0
	<i>To KK NDB (286.0).</i> Overhead VPK, turn right and track 163° OB from VPK VOR. Descend to 6,500 ft. Tune ADF to KK NDB and fly to NDB when signal is received.			163	117.0
	<i>To SEL NDB (220.0).</i> Overhead KK NDB, turn right to 228°. Tune ADF to SEL NDB. Fly to NDB			228	9.7
	Approach: WSSL 03-21 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Seletar Airport, runway in use, and land.				
	Length: 6,044 ft	Width: 151 ft	Surface: Asphalt		
Flight No: LM-32	Arrival Airport Elev: 46 ft			Estimated totals for this flight>>>	250.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

34. SINGAPORE TO PALEMBANG

Note : Runways allocated by the original documentation are Dep. WSSL Rwy 21, Arr. WIPP Rwy 11

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 46 ft		
Singapore (WSSL), Republic of Singapore To Palembang (WIPP), Indonesia	Departure: WSSL 03-21 Before take off, tune ADF to BM NDB (370.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute:				
	<i>To BM NDB.</i> After take off, turn and track 141° IB to BM NDB. Fly to NDB.			141	23.0
	<i>To TI NDB (385.0).</i> Turn left to 116°. Fly to NDB.			116	28.0
	<i>To NX NDB (365.0).</i> Turn and track 199° OB from TI NDB. Begin climb to 8,500 ft. Turn on ADF Morse Ident. When signal fades out over open water, fly Dead Reckoning. Tune ADF to NX NDB when signal is received. Fly to NDB.			199	162.0
	<i>To OW NDB (395.0).</i> Turn and track 141° OB from NX NDB. Start descend to 7,500 ft. Start timer. After 20 minutes flight from NX NDB, tune ADF to OW NDB (395.0). Fly to NDB.			141	99.0
	Approach: WIPP 11-29 (ILS Rwy 29, IPLB 110.50) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Sultan M Badaruddin Li Airport, runway in use, and land.			68	1.5
	Length: 9,848 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-33	Arrival Airport Elev: 49 ft			Estimated totals for this flight>>>	313.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

35. PALEMBANG TO JAKARTA

Note : Runways allocated by the original documentation are Dep. WIPP Rwy 11, Arr. WIII Rwy 07L

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 49 ft		
Palembang (WIPP), Indonesia To Jakarta (WIII), Indonesia	Departure: WIPP 11-29 Before take off, tune ADF to WW NDB (380.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To WP1 (Coastline).</i> After take off, turn and track 126° OB from WW NDB. Waypoint reached when reaching the coastline.			126	94.0
	<i>To WP2 (Isthmus).</i> At Coastline, climb to 8,500 ft. Turn to 184° and follow it until Isthmus between Islands. Tune ADF to GL NDB, 324 KHz. Turn on Morse Ident.			184	119.0
	<i>To GL NDB (324.0).</i> Turn left to 114°. Start descend to 7,500 ft. Cross Isthmus. Fly to GL NDB.			114	51.0
	Approach: WIII 07L-25R, 07R-25L (ILS at all runways) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Soekarno-Hatta Int'l Airport, runway in use, and land.			074	5.4
	Length: 07L-25R 11,803 ft 07R-25L 12,016 ft	Width: 197 ft	Surface: Concrete		
Flight No: LM-34	Arrival Airport Elev: 34 ft			Estimated totals for this flight>>>	269.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

36. JAKARTA TO SOLO

*Note : Runways allocated by the original documentation are Dep. WIII Rwy 07R, Arr. WARQ Rwy 08.
Check weather reports and select appropriate runways.*

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 34 ft		
Jakarta (WIII), Indonesia To Solo (WAHQ), Indonesia	Departure: WIII 07L-25R, 07R-25L Before take off, tune ADF to xxx NDB (xxx.x). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute:				
	To TG NDB. After take off, turn and track 091° IB to TG NDB. Fly to NDB.			091	10.8
	To AL NDB (215). Turn right to 107°. Fly to NDB.			107	12.4
	To PW NDB (250). Turn right to 132°. Fly to NDB.			132	33.0
	To OZ NDB (385). Turn left to 085°. Fly to NDB.			085	14.0
	To CA NDB (365). Turn right to 099°. Fly to NDB.			099	53.0
	To OC NDB (350.0). Turn left to 098°. Start timer. Follow coastline eastward. After 25 minutes flight, tune ADF to OC NDB. Fly to NDB.			098	109.0
	To SO NDB (255.0). Turn right to 144°. Fly to NDB.			144	39.0
	Approach: WAHQ 08-26 (ILS Rwy 26, ISLO 111.50) To runway. As soon as airport is in sight, adjust heading, fly to Adi Sumarmo Int'l. Airport, runway in use, and land.				
	Length: 8,542 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-35	Arrival Airport Elev: 418 ft			Estimated totals for this flight>>>	
					272.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

37. SOLO TO DENPASAR

*Note : Runways allocated by the original documentation are Dep. WARQ Rwy 08, Arr. WADD Rwy 09.
Check weather reports and select appropriate runways.*

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 418 ft		
Solo (WAHQ), Indonesia To Denpasar (WADD), Indonesia	Departure: WAHQ 08-26 Before take off, tune ADF to SO NDB (255.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To coastline (WP1).</i> After take off, turn and track 131° OB from SO NDB. Maintain heading upto coastline, your waypoint.			131	77.0
	<i>To BLI VOR/DME (116.20).</i> At coastline, turn east to 096° and follow south coastline to tip of island – Land's End. Begin 450 fpm descent at Land's End. Cross open water to Bali Int'l Airport and fly towards VOR.			096	206.0
	Approach: WADD 09-27 (ILS Rwy 27, IDPS 110.30) <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Bali Int'l Airport, runway in use, and land.				
	Length: 9,806 ft	Width: 148 ft	Surface: Asphalt		
Flight No: LM-36	Arrival Airport Elev: 14 ft			Estimated totals for this flight>>>	285.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

38. DENPASAR TO WAINGAPU

Note : Runways allocated by the original documentation are Dep. WADD Rwy 08, Arr. WADW Rwy 09.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 14 ft		
Denpasar (WADD), Indonesia To Waingapu (WATU), Indonesia	Departure: WADD 09-27 Before take off, tune NAV1 to BLI VOR/DME (116.20) and set OBS to 088°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To WP1.</i> After take off, turn and track 089° OB from BLI VOR. Cross open water. Waypoint reached at Nusa Penida island land point (DME 17.1 NM).			088	17.1
	<i>To WP2.</i> Fly along southern coast of Island up to tip of island (BLI DME 26.0 NM).			117	9.1
	<i>To WP3.</i> Cross open water to Lombok island land point (BLI DME 41 NM).			090	15.4
	<i>To WP4.</i> Follow southern coastline to southern tip of the Taman Wisata Perairan Teluk Bumbang, a marine recreational park (BLI DME 73 NM).			103	32.0
	<i>To WP5.</i> Cross open water to Sumbawa island land point (BLI DME 94 NM).			096	21.0
	<i>To WP6.</i> Follow southern coastline to land point (BLI DME 112 NM).			109	17.9
	<i>To WP7.</i> Follow southern coastline to land point (BLI DME 162 NM).			078	52.0
	<i>To WP8 (Tip of island).</i> Tune NAV1 to TBK VOR/DME (113.10). Follow southern coastline to land's end (TBK DME 59 NM).			082	64.0
	<i>To TBK VOR/DME.</i> Cross open water. Fly to VOR.			153	39.0
	<i>To WP9.</i> Follow northern coastline to most northern land point in sight.			077	41.0
	<i>To WP10.</i> Turn right to next land point. Begin 350 fpm descent. Tune ADF to NR NDB (295.0). Waypoint reached when ADF points to 150° (TBK DME 56 NM).			126	19.2
	Approach: WATU 15-33 <i>To runway.</i> Turn right to 150° and fly towards NR NDB. As soon as airport is in sight, adjust heading, fly to Mau Hau Airport, runway in use, and land.			150	13.5
	Length: 6,090 ft	Width: 98 ft	Surface: Asphalt		
Flight No: LM-37	Arrival Airport Elev: 33 ft Estimated totals for this flight>>>				343.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

39. WAINGAPU TO KUPANG

*Note : Runways allocated by the original documentation are Dep. WADW Rwy 15, Arr. WATT Rwy 07;
Check weather reports and select appropriate runways.*

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 33 ft		
Waingapu (WATU), Indonesia To Kupang (WATT), Indonesia	Departure: WATU 15-33 Before take off, tune ADF to NR NDB (295.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute:				
	<i>To WP1 (coastline).</i> Turn and track 093° OB from NR NDB. Fly to the coastline.			093	14.4
	<i>To WP2.</i> Fly south-east along coastline of Sumba island. Waypoint reached at 123° OB from NR NDB.			138	28.0
	<i>To WP3.</i> Cross open water. Waypoint reached at northern tip of Sawu island.			108	67.0
	<i>To WP4.</i> Cross open water. Waypoint reached at southern tip of Rote island. Start timer			118	64.0
	Begin 300 fpm descent at 13 minutes flight time from your last turn.				
	<i>To WP5 (south-eastern tip of Semaui island).</i> Tune ADF to OK NDB (385.0). Waypoint reached at the most south-eastern tip of Semaui island.			040	49.0
	<i>Towards OK NDB.</i> Turn right to 056° IB to OK NDB. Fly towards NDB..			056	18.3
	Approach: WATT 07-25 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to El Tari Airport, runway in use, and land.				
	Length: 8,207 ft	Width: 148 ft	Surface: Asphalt		
	Arrival Airport Elev: 335 ft Estimated totals for this flight>>>				240.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

40. KUPANG TO DARWIN

Note : Runways allocated by the original documentation are Dep. WATT Rwy 07, Arr. YPDN Rwy 11.

Check weather reports and select appropriate runways.

From – To	Flight Description			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 335 ft		
Kupang (WATT), Indonesia To Darwin (YPDN), Australia	Departure: WATT 07-25 Before take off, tune ADF to OK NDB (385.0). Set altimeter. Take off and start climb to 7,500 ft.				
	En route: <i>To WP1 (Indonesia coastline).</i> After take off, turn and track 106° OB from OK NDB. Waypoint reached when crossing the coastline. <i>To BGT NDB (308.0).</i> 423 NM Open Water to cross to reach Australia coastline. Start timer. Continue tracking 106° OB from OK NDB until signal fades, then about 346 NM Dead Reckoning before BGT NDB (in Australia) signal is received. When OK NDB signal fades out, tune ADF to BGT NDB, maintaining 106° heading, and adjust heading as soon as NDB signal is received..			106	21.0
	Approach: YPDN 11-29 (ILS Rwy 29, IDN 109.70), 18-36 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Darwin Int'l Airport, runway in use, and land.			106	423.0
	Length: 11-29 11,008 ft 18-36 5,025 ft	Width: 197 ft 98 ft	Surface: Asphalt	110	1.3
Flight No: LM-39	Arrival Airport Elev: 103 ft			Estimated totals for this flight>>>	
					446.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

41. DARWIN TO NGUKURR

Note : Runways allocated by the original documentation are Dep. YPDN Rwy 11, Arr. YNGU Rwy 11.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 103 ft		
Darwin (YPDN), Australia To Ngukurr (YNGU), Australia	Departure: YPDN 11-29, 18-36 Before take off, tune NAV1 to DN VOR/DME (112.6) and set OBS to 119°. Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To DN VOR.</i> After take off, turn and fly to VOR. <i>To YNGU.</i> Overhead DN, turn right to, and track 119° OB from DN. Watch heading and remain on track for +/- 195 NM. When signal fades out, about 70 NM Dead Reckoning on same heading before reaching YNGU.			103	1.8
	Approach: YNGU 11-29 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Ngukurr Airport, runway in use, and land.			119	263.0
	Length: 5,021 ft	Width: 59 ft	Surface: Asphalt		
Flight No: LM-40	Arrival Airport Elev: 45 ft Estimated totals for this flight>>>				265.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

42. NGUKURR TO MORNINGTON ISLAND

Note : Runways allocated by the original documentation are Dep. YNGU Rwy 11, Arr. YMTI Rwy 09

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 45 ft		
Ngukurr (YNGU), Australia To Mornington Isl. (YMTI), Australia	Departure: YNGU 11-29 Before take off, set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To WP1 (coastline, Limmen Bight River mouth).</i> After take off, turn to 108°. Watch heading. Waypoint reached at the northern tip of the island located in the middle of river's mouth.			108	61.0
	<i>To WP2.</i> Turn to 116°. Follow coastline South East and East. On the way, you will cross the Sir Edward Pellew group of islands (North-East of Borroloola). Waypoint reached at Calvert River mouth.			116	136.0
	<i>To WP3.</i> Turn right to 125°, following coastline South East and East. Waypoint reached at Massacre Inlet mouth.			125	44.0
	<i>To YMTI.</i> Turn left to 079° and fly towards Mornington Island Airport, in front of Denham Island northern tip.			079	49.0
	Approach: YMTI 09-27, 12-30 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Mornington Island Airport, runway in use, and land.				
	Length: 09-27 4,977 ft 12-30 2,721 ft	Width: 98 ft 59 ft	Surface: Asphalt Gravel		
Flight No: LM-41	Arrival Airport Elev: 33 ft			Estimated totals for this flight>>>	
					290.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

43. MORNINGTON ISLAND TO CLONCURRY

Note : Runways allocated by the original documentation are Dep. YMTA Rwy 06, Arr. YCCY Rwy 12.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 33 ft		
Mornington Isl. (YMTI), Australia To Cloncurry (YCCY), Australia	Departure: YMTI 09-27, 12-30 Before take off, set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To CCY NDB (264.0).</i> After take off, turn to 157°. Dead Reckoning until CCY NDB signal is received (75 NM range). Fly to NDB.			157	252.0
	Approach: YCCY 06-24, 12-30 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Cloncurry Airport, runway in use, and land.				
	Length: 06-24 3,799 ft 12-30 6,569	Width: 59 ft 98 ft	Surface: Asphalt		
Flight No: LM-42	Arrival Airport Elev: 616 ft			Estimated totals for this flight>>>	252.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

44. CLONCURRY TO LONGREACH

Note : Runways allocated by the original documentation are Dep. YCCY Rwy 12, Arr. YLRE Rwy 22.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 616 ft		
Cloncurry (YCCY), Australia To Longreach (YLRE), Australia	Departure: YCCY 06-24, 12-30 Before take off, tune ADF to CCY NDB (264.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>Towards LRE NDB (353.0).</i> After take off, turn and track 122° OB from CCY NDB. Start timer. After +/- 32 minutes, CCY signal will fade out. Reset timer. Maintain heading. Tune ADF to LRE NDB. Dead Reckoning until LRE signal is received. Adjust heading as required as soon as LRE becomes active and fly towards LRE NDB.			122	268.0
	Approach: YLRE 04-22 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Longreach Airport, runway in use, and land.				
	Length: 04-27 6,360 ft	Width: 98 ft	Surface: Asphalt		
Flight No: LM-43	Arrival Airport Elev: 627 ft			Estimated totals for this flight>>>	269.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

45. LONGREACH TO CHARLEVILLE

Note : Runways allocated by the original documentation are Dep. YLRE Rwy 04, Arr. YBCB Rwy 22.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 627 ft		
Longreach (YLRE), Australia To Charleville (YBCB), Australia	Departure: YLRE 04-22 Before take off, tune ADF to LRE NDB (353.0). Set altimeter. Take off and start climb to x,xxx ft.				
	Enroute: <i>To BCK NDB (416.0).</i> After take off, turn and track 126° OB from LRE NDB. Both NDB's having same range, you can switch to BCK NDB when leveling at cruise altitude. <i>Towards CV NDB (269.0).</i> Turn right to 151° OB from BCK NDB. Start timer. After 28/30 minutes, tune ADF to CV NDB, and fly towards CV NDB.			126	87.0
	Approach: YBCB 12-30, 18-36 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Charleville Airport, runway in use, and land.			151	127.0
	Length: 12-30 5,006 ft 18-36 3,512 ft	Width: 98 ft 75 ft	Surface: Asphalt		
	Arrival Airport Elev: 1,003 ft				
Flight No: LM-44	Estimated totals for this flight>>>				215.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

46. CHARLEVILLE TO NYNGAN

Note : Runways allocated by the original documentation are Dep. YBCB Rwy 12, Arr. YNYN Rwy 19.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: ft		
Charleville (YBCB), Australia To Nyngan (YNYN), Australia	Departure: YBCB 12-30, 18-36 Before take off, tune ADF to CV NDB (269.0). Set altimeter. Take off and start climb to 7,500 ft.				
	Enroute: <i>To BRW NDB (416.0).</i> After take off, turn and track 163° OB from CV NDB until signal fades, then about 65 NM Dead Reckoning before BRW NDB signal is received. Fly to NDB. <i>To NYN NDB (404.0).</i> Turn left and track 158° OB from BRW NDB. Start timer. 20 minutes after passing BRW NDB, tune ADF to NYN NDB and fly towards NDB.			163	215.0
	Approach: YNYN 05-23, 18-36 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Nyngan Airport, runway in use, and land.			158	97.0
	Length: 05-23 5,386 ft 18-36 3,492 ft	Width: 98 ft	Surface: Asphalt Grass		
	Arrival Airport Elev: 569 ft				
Flight No: LM-45	Estimated totals for this flight>>>				313.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

47. NYNGAN TO ALBURY

Note : Runways allocated by the original documentation are Dep. YNYN Rwy 19, Arr. YMAY Rwy 25

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 7,500 ft	Apt Elev: 569 ft		
Nyngan (YNYN), Australia To Albury (YMAY), Australia	Departure: YNYN 05-23, 18-36 Before take off, tune ADF to NYN NDB (404.0). Set altimeter. Take off and start climb to x,xxx ft.				
	Enroute: <i>To CDO NDB (401.0).</i> After take off, turn and track 168° OB from NYN NDB. 20 minutes flight after take off, tune ADF to CDO NDB. Fly to NDB. Stop and reset timer.			168	91.0
	<i>To WWL NDB (389.0).</i> Turn to 170°. Fly to NDB.			170	52.0
	<i>To TEM NDB (209.0).</i> Turn left to 139°. Fly to NDB.			139	34.0
	<i>To WG NDB (221.0).</i> Turn right to 172°. Fly to NDB..			172	44.0
	<i>Towards AY NDB (236.0).</i> Turn to 191°. Start timer. Descend to 6,500 ft. Tune ADF to AY NDB. Fly towards NDB.			191	59.0
	Approach: YMAY 07-25 <i>To runway.</i> As soon as airport is in sight, adjust heading, fly to Albury Airport, runway in use, and land.				
	Length: 6,229 ft	Width: 98 ft	Surface: Asphalt		
Flight No: LM-46	Arrival Airport Elev: 539 ft Estimated totals for this flight>>>				280.0 NM

London to Melbourne Air Race – 1934 *(The MacRobertson Trophy Air Race)*

48. ALBURY TO MELBOURNE

Note : Runways allocated by the original documentation are Dep. YMAY Rwy 25, Arr. YMML Rwy 16.

Check weather reports and select appropriate runways.

From – To	<u>Flight Description</u>			Course (Leg) Deg	Distance (Leg) NM
	Dep. Rwy : check WX	Init. Alt: 6,500 ft	Apt Elev: 539 ft		
Albury (YMAY), Australia To Melbourne (YMML), Australia	Departure: YMAY 07-25 Before take off, tune ADF to COR NDB (380.0). Set altimeter. Take off and start climb to 6,500 ft.				
	Enroute:				
	To COR NDB (380.0). After take off, turn to 266° IB to COR NDB. Fly to NDB.			266	30.0
	To SHT NDB (212.0). Turn to 227°. Fly to NDB.			227	54.0
	To MNG NDB (254.0). Turn left to 188°. Fly to NDB.			188	30.0
	To BOL NDB (362.0). Turn to 208°. Fly to NDB.			208	39.0
	To YMML Airport. Turn left to 158°. Fly to NDB.			158	12.9
	Approach: YMML 09-27 (ILS Rwy 27, IMW 109.30) , 16-34 (ILS Rwy 16, IMS 109.70) To runway. As soon as airport is in sight, adjust heading, fly to Melbourne Int'l. Airport, runway in use, and land.				
	Length: 09-27 7,491 ft 16-34 12,014	Width: 148 ft 197 ft	Surface: Asphalt		
Flight No: LM-47	Arrival Airport Elev: 434 ft			Estimated totals for this flight>>>	165.0 NM