



To:
B777

FLT OPS / TECH / 24 / Thu May 17 2018
Thu May 17 2018

Subject: MINIMUM OXYGEN PRESSURE REQUIREMENT FOR PASSENGERS ON APBMS

For PIA 777 aircraft (except AP-BMS), passenger oxygen is provided by chemical generators and i.e for 22 minutes. For AP-BMS aircraft, passenger oxygen system is of gaseous oxygen cylinders instead of chemical generators. Duration of oxygen availability in case of decompression depends upon oxygen cylinder pressure, temperature and number of passengers onboard. Guidance for this calculation is given on page 2.1.2 in FPPM for AP-BMS available on web. For ease of use of that information following table is formulated.

This table is based on following assumptions:

1. FL390 at decompression.
2. Total post decompression time is one hour. This includes descent, level-off at intermediate altitude (if applicable) and flight at final level-off altitude.
3. Time to shut down 90% of masks at or below 14000 ft pressure altitude is 11 minute. This duration is a nominal time determined by Boeing as the amount of time it would take for the Flight Attendants to walk down the aisle and shut off 90% of the oxygen masks in order to obtain the minimum required oxygen availability for 10% of the passengers when the airplane is flying at altitudes above 10,000 ft up to and including 14,000 ft.



AP-BMS MINIMUM OXYGEN CYLINDER PRESSURE DISPATCH REQUIREMENT(FOR PAX)

NO. OF PAX →	100	150	200	250	300	350	400	442
CYLINDER TEMPERATURE ↓ (DEG C)	REQUIRED PRESSURE (PSI)							
-10	365	425	484	542	608	666	731	797
-5	372	434	494	554	621	680	746	813
0	379	443	504	566	634	694	761	829
5	386	452	514	578	647	708	776	845
10	393	461	524	590	660	722	791	861
15	400	470	534	602	673	736	806	877
20	407	479	544	614	686	750	821	893
25	414	488	554	626	699	764	836	909
30	421	497	564	638	712	778	851	925
35	428	506	574	650	725	792	866	941
40	435	515	584	662	738	806	881	957
45	442	524	594	674	751	820	896	973
50	449	533	604	686	764	834	911	989



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Capt. MASOOD ALEEM OPEL
Chief Pilot Technical
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CC: