1. Record Nr. UNINA9910877199503321 Autore Quantick H. R. Titolo Climatology for airline pilots / / H.R. Quantick Pubbl/distr/stampa Malden, MA, : Blackwell Science, 2001 **ISBN** 1-283-85851-7 0-470-69904-3 0-470-69847-0 Edizione [1st ed.] Descrizione fisica 1 online resource (298 p.) Disciplina 629.1324 Soggetti Climatology Meteorology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Climatology for Airline Pilots; Contents; Preface; Acknowledgements; Nota di contenuto Introduction: Part 1: Global Weather: Chapter 1: Global Air Circulation: 1.1 Idealised circulation; Chapter 2: The Global Overview - Notes; 2.1 Introduction; 2.2 Atmospheric heat exchange processes; 2.3 Long waves (Rossby waves); 2.4 Ocean currents; 2.5 Arid climates; 2.6 Deserts: 2.7 'Trade winds' and 'trade-wind inversions': 2.8 Thunderstorms; 2.9 Polar lows; 2.10 Temperate maritime climates; References; Chapter 3: Upper Winds and Jet Streams; 3.1 Upper winds; 3.2 Jet streams: References: Chapter 4: Easterly Waves 4.1 Wave disturbancesReference; Chapter 5: The Inter-tropical Convergence Zone (ITCZ); 5.1 Introduction; Chapter 6: Tropical Storms; 6.1 Classification of tropical cyclones; References; Chapter 7: Upper Air Temperature and Tropospheric Heights; 7.1 Height of the 0°C isotherm; 7.2 Height of the -40°C isotherm; 7.3 Height of the tropopause: Chapter 8: Polar Climates: 8.1 Inversions: 8.2 Surface temperatures; 8.3 Flying conditions, North polar region; References; Chapter 9: The Climatic Zones; 9.1 Equatorial zone (wet equatorial climate); 9.2 Savannah zone (trade wind littoral climate) 9.3 Arid subtropical zone (tropical desert and steppe climate)9.4 Warm

temperate (transitional) zone (Mediterranean climate); 9.5 Cool

temperate zone (middle latitude climate); 9.6 Boreal zone (mid-latitude

steppe climate); 9.7 Polar (tundra climate); 9.8 Polar zones (perpetual frost); Part 2: Route and Area Climatology; Chapter 10: Introduction and the North Atlantic; 10.1 Introduction; 10.2 Route climatology in the North Atlantic; Chapter 11: Weather in the Arctic (North of 66°N); 11.1 Ice; 11.2 Pressure distribution; 11.3 Temperature; 11.4 Precipitation; 11.5 Cloud; 11.6 Fog

11.7 Ice accretion/freezing levels11.8 Aurora Borealis; Chapter 12: Weather in Arctic Regions of Norway (Coastal Area); 12.1 Effect of different air masses; Chapter 13: Weather in Europe; 13.1 Central Europe; 13.2 Eastern Europe; Chapter 14: Weather in the Mediterranean; 14.1 Arctic and polar continental air (A, Pc); 14.2 Polar maritime air (Pm); 14.3 Tropical continental air (Tc); 14.4 Tropical maritime air (Tm); 14.5 Mediterranean air; 14.6 Special phenomena; 14.7 Khamsin or Ghibli depressions; 14.8 Sandstorms, duststorms and rising sand: 14.9 Summary of local winds in the Mediterranean Chapter 15: Weather in Africa15.1 Movement of the ITCZ: 15.2 The North-African coast to the Red Sea; 15.3 Khartoum to tropical East Africa: 15.4 Tropical E Africa to South Africa: 15.5 Low-level jet stream: from (Findlater 1969); 15.6 West Africa; References; Chapter 16: Weather in the Middle East; 16.1 Flying weather; 16.2 Pressure systems; 16.3 Upper winds; Chapter 17: Weather - Arabian Gulf to Singapore; 17.1 Tropical depressions and cyclones: 17.2 Climate of Malaysia: 17.3 Summary; Chapter 18: Weather - Singapore to Japan; 18.1 November to March: 18.2 April to August 18.3 September to mid-October

## Sommario/riassunto

Climatology - particularly the study of difficult and demanding weather conditions - is of major importance to pilots now that aeroplanes fly over previously unavailable routes such as the North Pole and take direct routes over very large oceans. Existing books on climatology address physical, biological or cultural environments and do not supply adequate information for the pilot. Nor do the present books on aviation meteorology provide sufficient detail on subjects such as arid climates, tropical storms and upper tropospheric winds and temperatures. This new book concentrates on as