

# Route Flexibility Comparisons – Russia and China

Cross Polar Working Group/18

Paris France

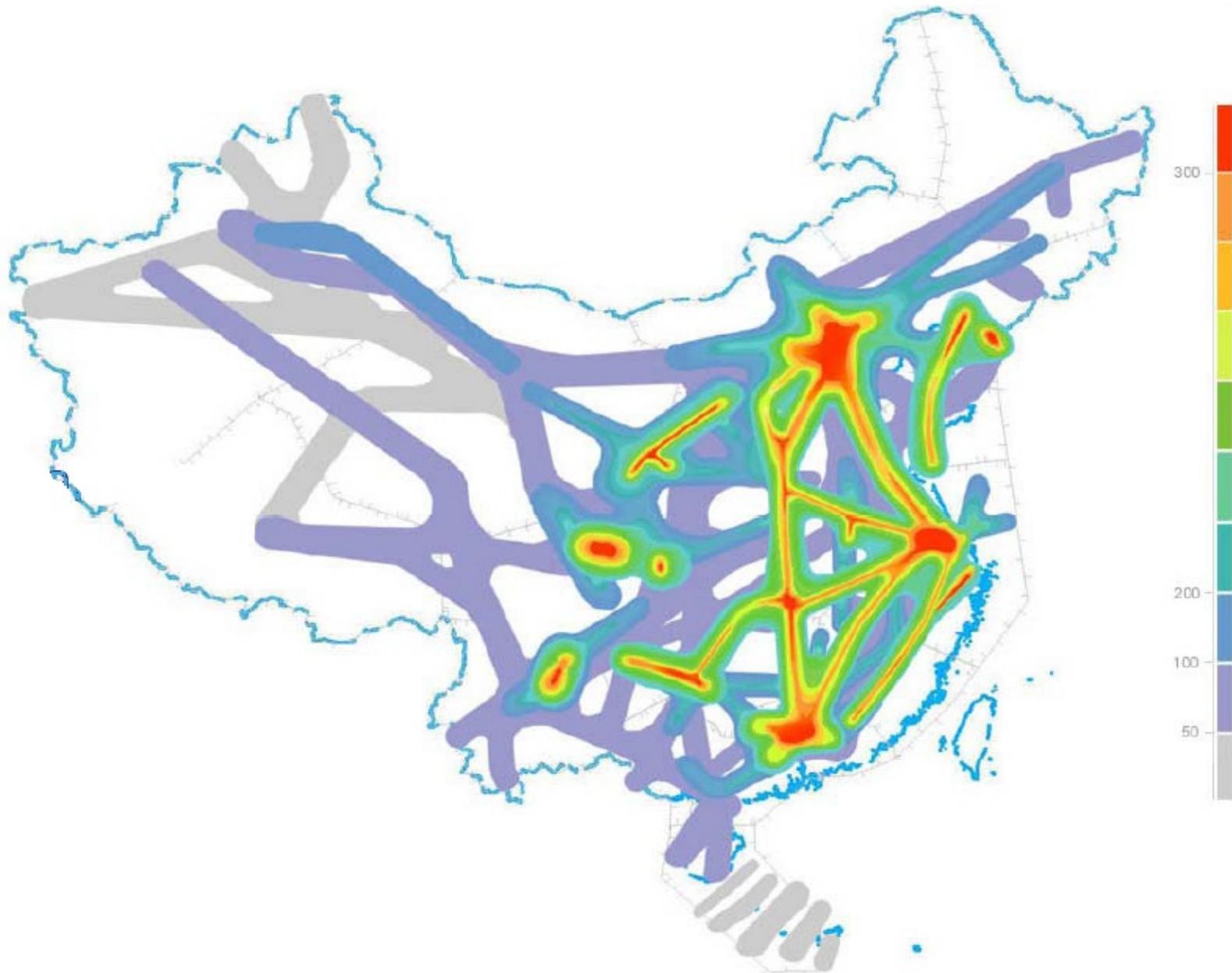
December 16-19, 2014

Gene Cameron

Manager International Air Traffic  
Systems

United Airlines

# Main China Traffic flows





# China Entry/Exit Points

## Cross Polar Flights

WESTBOUND: LAMEN MAGIT SIMLI POLHO MORIT

EASTBOUND: LAMEN ARGUK SIMLI POLHO MORIT

## Non-Polar Flights

KSFO TO ZUUU: MAGIT

ZUUU TO KSFO: LAMEN

# CHINA ATS ROUTE CONSTRAINTS

**FLIGHTS ARE LIMITED TO A SINGLE ATS ROUTE  
WITHIN CHINA BASED ON ENTRY/EXIT FIX:**

**EXAMPLE: ZUUU TO KSFO**

**EXIT FIX: LAMEN/SADLI**

**ATS ROUTING**

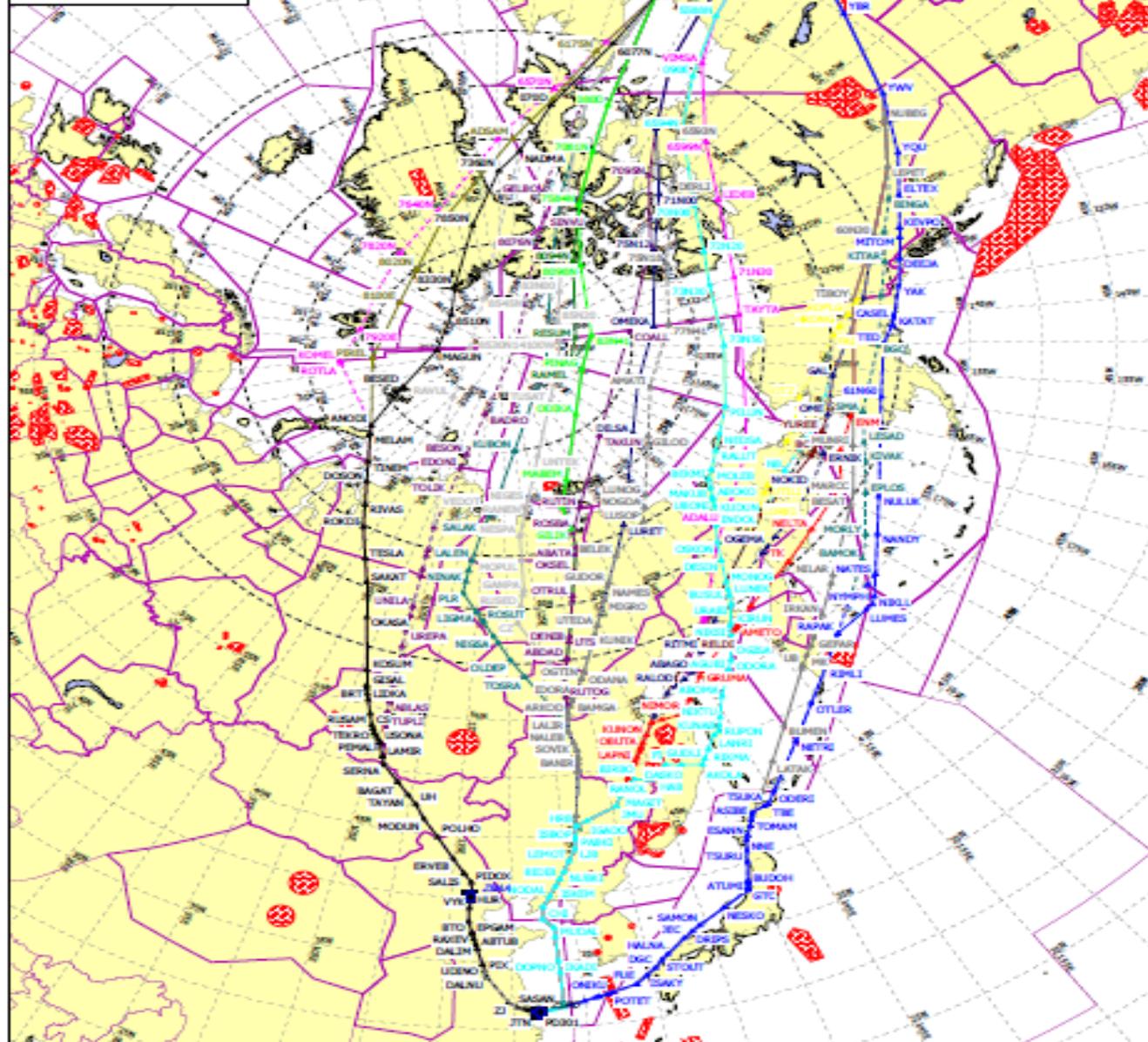
**ZUUU JTG W26 GAO V38 ENH  
B213 WHA R343 PK A593 LAMEN**

**Route Chart**  
**UAL835 ORD-PVG**

15SEP14  
N180UA 44

Projection: Polar Stereographic  
True Scale: 50%

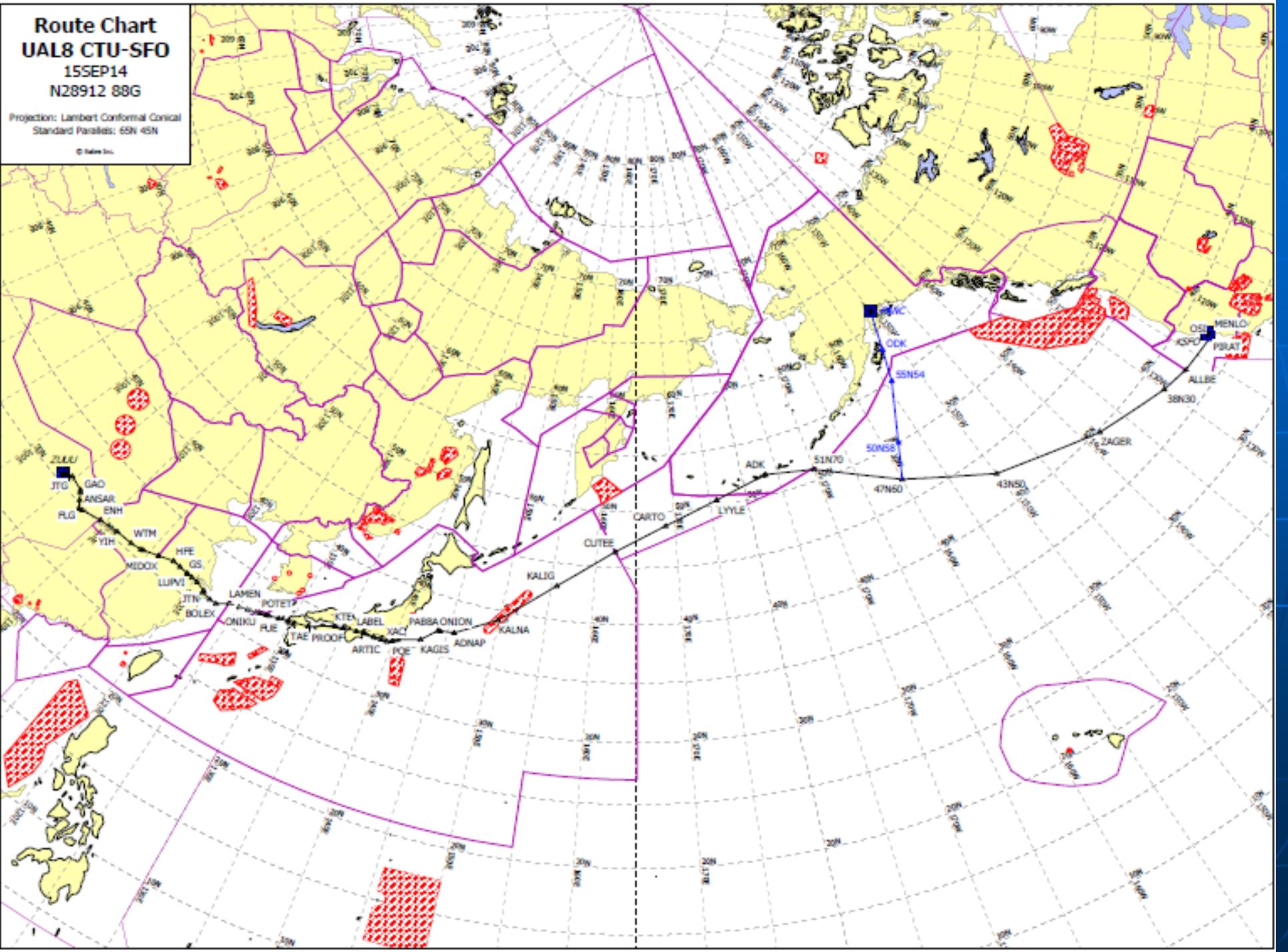
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**Route Chart**  
**UAL8 CTU-SFO**  
15SEP14  
N28912 88G

Projection: Lambert Conformal Conical  
Standard Parallels: 65N 45N

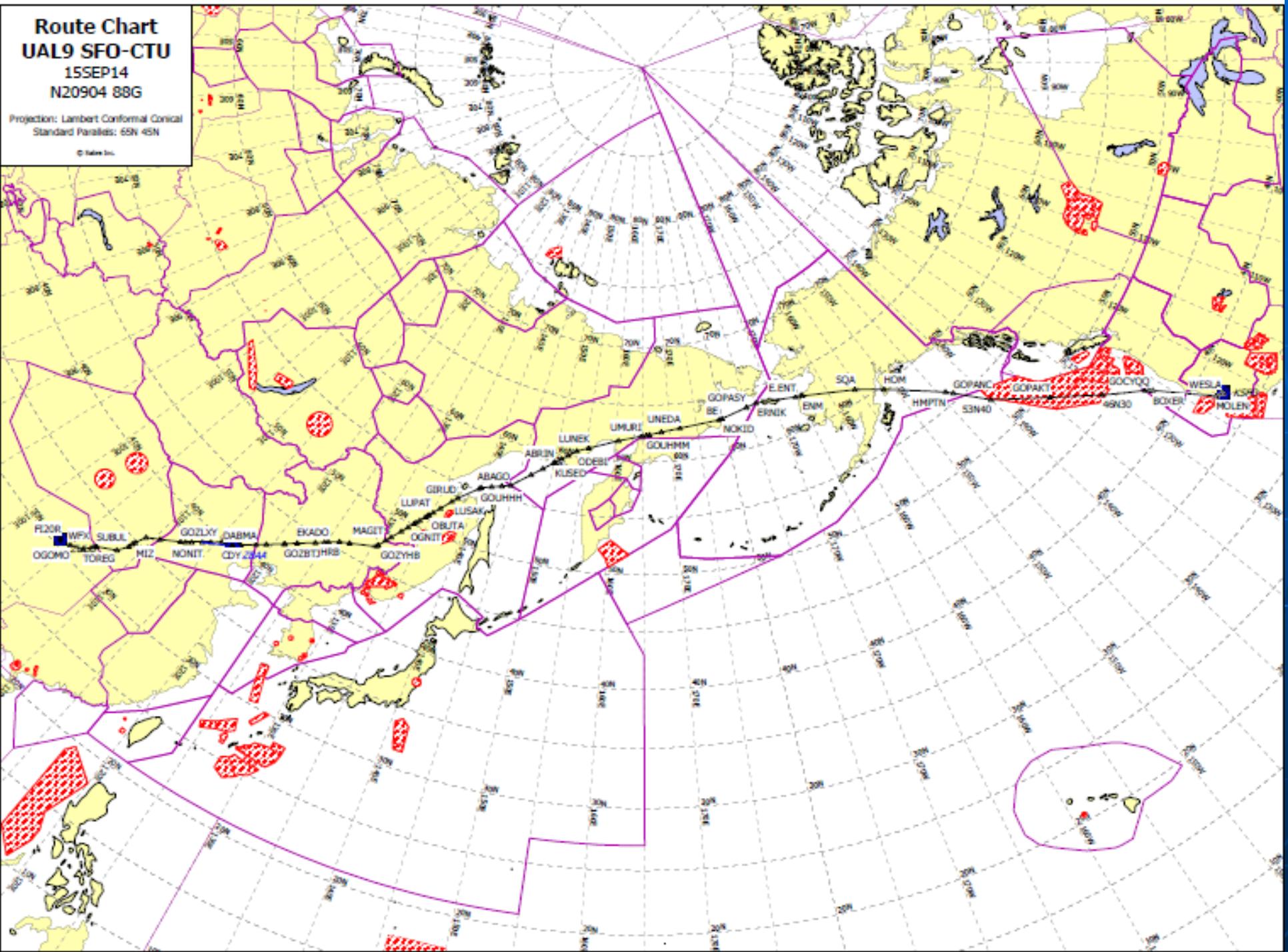
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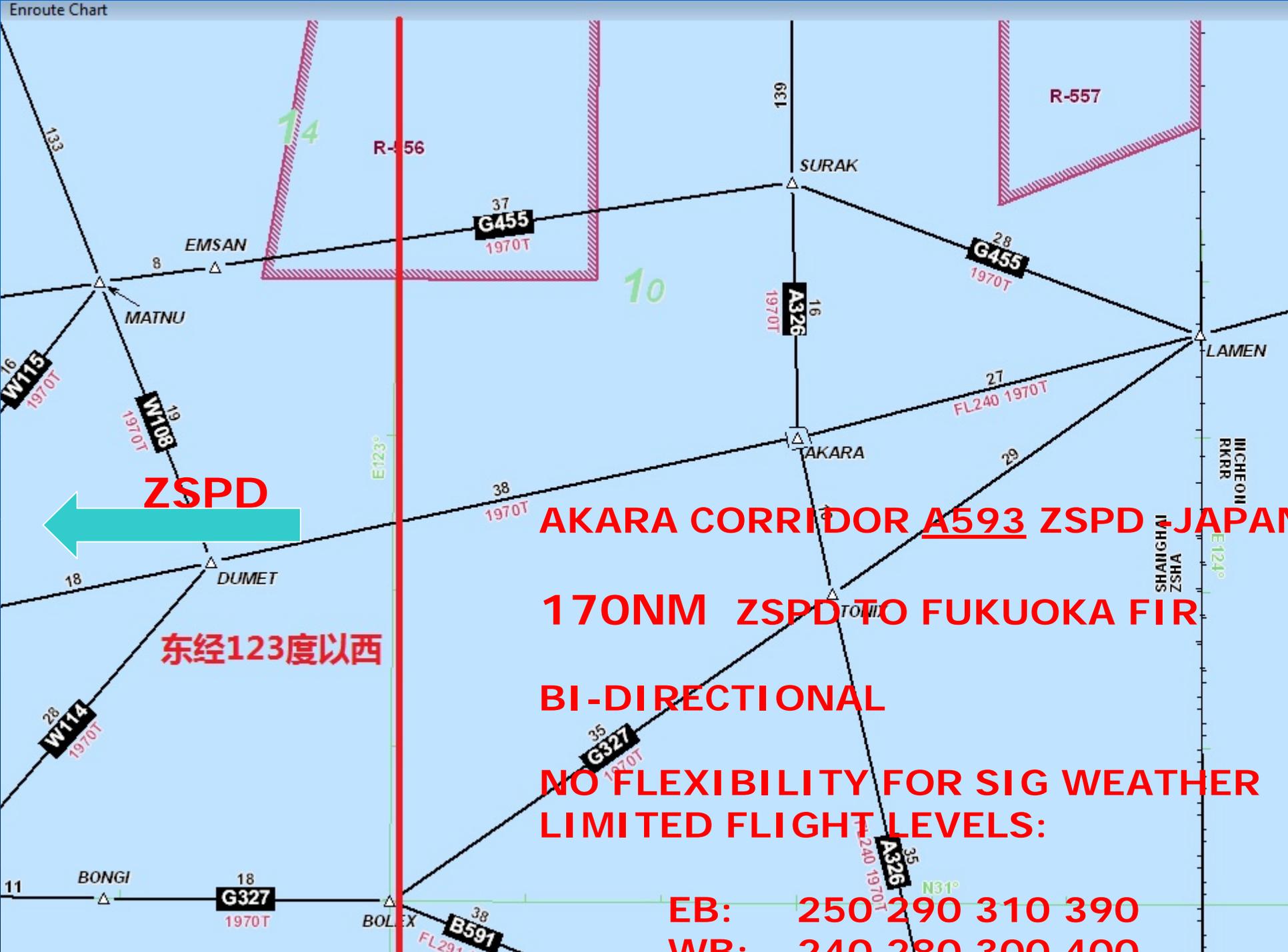


**Route Chart**  
**UAL9 SFO-CTU**  
15SEP14  
N20904 88G

Projection: Lambert Conformal Conical  
Standard Parallels: 65N 45N

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**ZSPD**



东经123度以西

**AKARA CORRIDOR A593 ZSPD JAPAN**

**170NM ZSPD TO FUKUOKA FIR**

**BI-DIRECTIONAL**

**NO FLEXIBILITY FOR SIG WEATHER  
LIMITED FLIGHT LEVELS:**

**EB: 250 290 310 390**

**WB: 240 280 300 400**

# **RUSSIAN ENTRY/EXITS NORTH AMERICA/CHINA FLIGHTS**

**ANCHORAGE AND RUSSIAN FIR ENTRY/EXIT FIXES**

**21 (INCLUDES 2 ADDED Nov 2014)**

**ICELAND/NORWAY AND RUSSIA ENTRY/EXIT FIXES**

**7**

**RUSSIA/MONGOLIA - CHINA ENTRY/EXITS  
NORTH AMERICA TO/FROM CHINA FLIGHTS**

**5 (ARGUK EASTBOUND ONLY)**

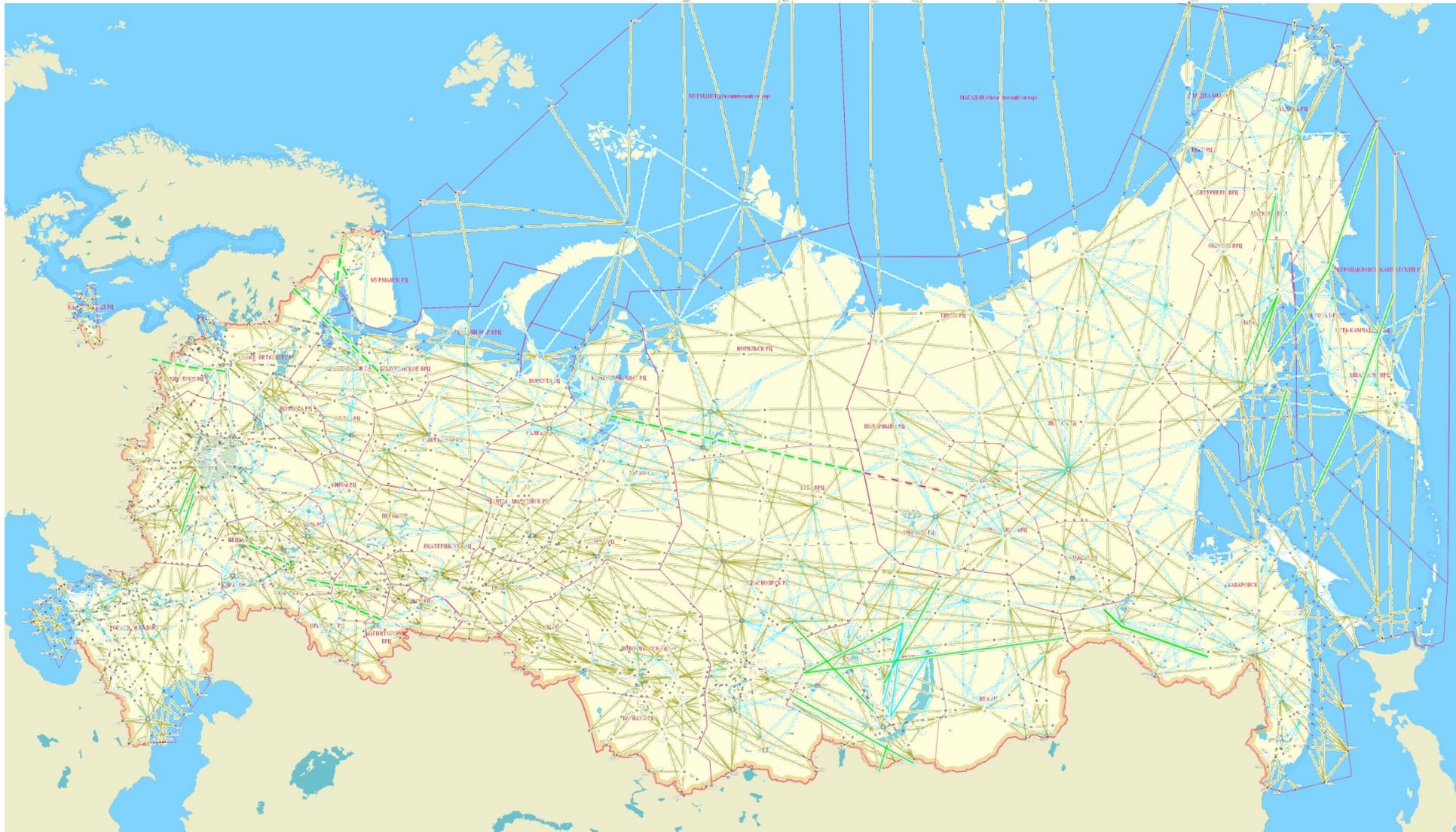
**RUSSIAN ATS ROUTE FLEXIBILITY**

**NORTH AMERICA – CHINA FLIGHTS**

**ALL INTERNATIONAL ATS ROUTES WITHIN RUSSIA ARE AVAILABLE**

**BETWEEN FIR ENTRY AND EXIT FIXES**

# Russian ATS Routes





# SUMMARY

- There is a significant need for more entry/exit fixes in China
- There is also a significant need for more ATS route flexibility within China

Thank You for your attention to this presentation

**Questions?**

