REPORT FROM CHINA

THE OPERATIONAL ACTIVITIES WITH GMDSS FOR NAVAREA XI (IOR) IN CHINA

1. INTRODUCTION

The China Meteorological Administration (CMA) is responsible for preparing and providing meteorological message services for NAVAREA XI(IOR) under GMDSS. The services include the Inmarsat SafetyNET and NAVTEX. The National Meteorological Center (NMC) at CMA provides the Inmarsat SafetyNET service. Dalian, Shanghai, Fuzhou, Guangzhou, and Sanya meteorological observatories issue meteorological messages via NAVTEX.

2. INMARSAT SAFETYNET SERVICE

2.1 The NMC provides operational services, including weather condition monitoring, weather situation analysis, weather forecast and meteorological messages. The meteorological messages, which include the meteorological information for the area covering 100-125°E, 0-30°N transferred from Hong Kong through GTS, are issued four times per day at 03:30, 10:15, 15:30 and 21:15 UTC.

2.2 CONTENTS OF BULLETINS

2.2.1 Warning information: Including marine environmental elements such as gales with scales of grade 6 and above, dense fog, the position of low and (or) tropical storms and their wind radii of Beaufort force 8 and 10, Minimum pressure, speed and direction of movement, 24 and 48 hour forecasts, visibility less then 10 kilometers and waves higher than 3 meters, and areas where the above conditions may appear.

When a typhoon has been given a name, warning messages will be released immediately, including position, intensity, direction, speed, area of influence and possible variations in intensity, direction and speed for the next 24 hours.

- 2.2.2 Summary and forecast of synoptic systems: Including positions of high, low, tropical cyclone, cold front, warm front and stationary front.
- 2.2.3 Distribution and forecast of weather elements: Including wind, fog, poor visibility and severe swell.

2.3 AN EXAMPLE OF BULLETIN

2:31:11:11:00 BT ZCZC PAN PAN= MESSAGE FOR NAVAREA XI(IOR) ISSUED BY NMC, BEIJING AT 0330UTC DEC. 13 2006= MESSAGE IS UPDATED EVERY 06 HOURS= SYNOPSIS VALID 0000UTC DEC. 13= FORECAST VALID 0000UTC DEC. 14= WARNING= TY 0623(0622) UTOR 960HPA AT 16.4N 112.7E MOVING WNW 10KM/H AND MAX WINDS 38M/S NEAR CENTER(SEAS UP TO 7.0M) AND RADIUS OF 30KTS WINDS 380KM RADIUS OF 50KTS WINDS 100KM FORECAST FOR 140000UTC AT 17.6N 111.1E 975HPA MAX WINDS 33M/S NEAR CENTER= SUMMARY= WINDS FROM 14 TO 38M/S SEAS UP TO 7.0M OVER MIDDLE AND NORTH PARTS OF SOUTH CHINA SEA= NE WINDS FROM 12 TO 18M/S SEAS UP TO 3.5M OVER

TAIWAN STRAIT AND SEA EAST AND SOUTH OF TAIWAN AND BASHI CHANNEL AND BALINTANG CHANNEL AND SOUTH PART OF SOUTH CHINA SEA= FOG OBSERVED LOCALLY OVER YELLOW SEA AND WEST PART OF EAST CHINA SEA AND HORIZONTAL VISIBILITY LESS THAN 10KM= HORIZONTAL VISIBILITY LESS THAN 10KM OVER TAIWAN STRAIT AND NORTH PART OF SOUTH CHINA SEA AND NORTH PART OF THAILAND GULF AND ANDAMAN SEA AND SEA WEST OF SUMATERA AND SUNDA STRAIT AND LAUT MALUKU= FORECAST= WINDS FROM 14 TO 33M/S SEAS UP TO 6.5M OVER MIDDLE AND NORTH PARTS OF SOUTH CHINA SEA= NE WINDS FROM 12 TO 18M/S SEAS UP TO 3.5M OVER SEA EAST AND SOUTH OF HAINAN PROVINCE AND TAIWAN STRAIT AND SEA EAST AND SOUTH OF TAIWAN AND BASHI CHANNEL AND BALINTANG CHANNEL AND SOUTH PART OF SOUTH CHINA SEA=

3. NAVTEX SEVICE

- 3.1 Dalian, Shanghai, Fuzhou, Guangzhou and Sanya Costal Radio Stations had been established in China. Dalian, Shanghai, Fuzhou, Guangzhou and Sanya meteorological observatories are responsible for providing meteorological messages to them several times a day.
- 3.2 The bulletin information includes warning messages, general synoptic conditions and forecasts. The warning messages include gale, dense fog, the low and (or) tropical storm, heavy rainfall, etc. General synoptic conditions include position of high, low, tropical cyclone, cold front, warm front, stationary front and their movements. The forecasts concern sky condition, wind speed and direction, sea waves, etc. in future 24 hours.

3.3 Bulletin examples

Example (1):

ZCZC

FXCI69 BCGZ 232100 232100UTC JAN 2002 IN ENGLISH GUANGZHOU OBSY WEATHER REPORT = NO WARNING IN RESPONSIBLE AREA = MARINE WEATHER FORECAST FOR 24 HOURS FROM 240100Z = TAIWAN STRAITS = CLOUDY TO OVERCAST WITH SCATTER LIGHT RAIN WIND NE 22 TO 33 KTS GUSTS 34 TO 40 KTS SEAS ROUGH TO VERY ROUGH VIS 8 TO 16 KMS = EAST GUANGDONG = FINE TO CLOUDY WINDS NE TO E 22 TO 27 KTS GUSTS 28 TO 33 KTS SEA ROUGH VIS 8 TO 16 KMS = WEST GUANGDONG QIONGZHOU STRAITS = OVERCAST WITH LOCAL SHOWERS WINDS ELY 17 TO 21 KTS GUSTS 22 TO 27 KTS SEA MODERATE VIS 5 TO 15 KMS = BEIBU WAN GULF = OVERCAST WITH LOCAL SHOWERS WIND NE 17 TO 21 KTS GUSTS 22 TO 27 KTS SEA MODERATE VIS 8 TO 16 KMS = SOUTHWEST HAINAN ISLAND = CLOUDY TO OVERCAST WINDS NE TO E 17 TO 21 KTS GUSTS 22 TO 27 KTS SEA MODERATE VIS 10 TO 20 KMS = XISHA = CLOUDY WINDS NE TO E 17 TO 27 KTS GUSTS 28 TO 33 KTS SEAS MODERATE TO ROUGH VIS 15 TO 25 KMS = DONGSHA ZHONGSHA NANSHA = CLOUDY WIND NE 22 TO 33 KTS GUSTS 34 TO 40 KTS SEAS ROUGH TO VERY ROUGH VIS 10 TO 20 KMS = BASHI = CLOUDY TO OVERCAST WITH LOCAL SHOWERS WIND NE 22 TO 33 KTS GUSTS 34 TO 40 KTS SEAS ROUGH TO VERY ROUGH VIS 8 TO 16 KMS = VABELLA = CLOUDY TO OVERCAST WIND NE 22 TO 33 KTS GUSTS 34 TO 40 KTS SEAS ROUGH TO VERY ROUGH VIS 10 TO 20 KMS = ST.JACQUES = CLOUDY TO OVERCAST WITH LOCAL SHOWERS WIND NE 22 TO 27 KTS GUSTS 28 TO 33 KTS SEA ROUGH VIS 8 TO 16 KMS = ZENGMU ANSHA REEF = CLOUDY TO OVERCAST WITH SHOWERS WIND NE 22 TO

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27 KTS GUSTS 28 TO 33 KTS SEA ROUGH VIS 5 TO 15 KMS =
IN CHINESE
1684 1558 3051 6272 0669 1131 3051 1032 0707 =
6307 0117 0575 0355 3541 6226 0707 =
9924 9809 2607 0171 (24) 1420 2514 3189 3152 1131 3051 7315 0707 =
0669 3494 3189 1499 = 1122 7189 6567 7113 2589 0433 2414 1420
7183 2639 0554 7364 (22-33) 4634 7109 7364 (34-40) 4634 1129 3186
0451 1565 3186 6018 4453 (8-16) 0361 6849 =
1684 2639 2639 6752 = 2532 6567 1122 7189 2639 0554 0451 2639
7364 (22-27) 4634 7109 7364 (28-33) 4634 1129 3186 6018 4453
(8-16) 0361 6849 =
1684 2639 6007 6752 3890 1558 3189 1499 = 7113 1444 6752 2589
7109 7183 0252 2639 7364 (17-21) 4634 7109 7364 (22-27) 4634 0022
3186 6018 4453 (5-15) 0361 6849 =
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0451 2639 7364 (17-21) 4634 7109 7364 (22-27) 4634 0022 3186 6018
4453 (10-20) 0361 6849 =
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7109 7364 (28-33) 4634 0022 3186 0451 1129 3186 6018 4453 (15-25)
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3186 6018 4453 (8-16) 0361 6849 =
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0554 7364 (22-27) 4634 7109 7364 (28-33) 4634 1129 3186 6018 4453
(5-15) 0361 6849 =
NNNN
ZCZC 000
FSCI40 BCGZ 240900
99936 00707 11144
99937 00101 11144
99938 00101 11233
99939 00207 11232
99940 00101 11144
99941 00101 11144
NNNN
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Example (2):

ZCZC RE27 1050
290000UTC JAN20002
DALIAN OBSY NO WARNING STOP
SYNOPTIC SITUATION 281800Z
HIGH 1061 HAP AT 47N95E MOVING E 12 KTS X
COLD FRONT FROM 49N 123E PASSING 47N 120E TO 46N 112E X
LOW 1015 HAP AT 123E MOVING SE 13 KTS STOP
24 HOURS WEATHER FORECAST FROM 290000Z
BOHAI SEA BOHAI STRAITS NORTH AND CENTRAL HUANGHAI SEA X
PARTLY CLOUDY SOMETIMES CLOUDY X
WLY WINDS FORCE 5 TO 6 BECOMING N WINDS FORCE 6 NOON X
SEA MODERATE BECOMING ROUGH STOP
NNNN

3.4 NEW DEVELOPMENTS

As a result of the developments of both the China marine weather services and customer demands in recent years, the content of NAVTEX has been expanding. In addition to the traditional products, coastal weather observatories have issued some new marine weather products with local characteristics. For example:

Service	Content	Frequency
Typhoon warnings	00- 72 hour forecasts with 12 hours interval	Issued every 6 hours when typhoon is to the west of 132°E.
	Typhoon position, intensity and gale radii	Issued every hour when typhoon is offshore.
Offshore weather forecasts: wind, fog, rainfall and wave.	24- 48 hour forecasts for 13 China offshore sea areas issued with 12h interval.	3 times a day.
Marine hazard weather warnings: wind scales of grade 8 and above, visibility less than 1 km and wave higher than 4m.	24-hour forecast for sea area WMO XI.	Twice a day.

Since June of 2005, Dalian Coastal Radio Station has opened its voice weather service on single sideband for free, which is the only station that has opened this service in China. With high quality services, Dalian Coastal Radio Station has gained praises from customers and peer cooperators.

CMA has been in cooperation with China Maritime Safety Administration to work for Chinese broadcasts on NAVTEX.

4. Others

The NMC has also established an operational system to provide navigation services. The services provide meteorological messages, navigation and optimal shipping line to ocean-going voyages.