TYPHOON JEAN - 260600Z JULY TO 070000Z AUGUST

I. DATA

A. Statistics

1. Number of warnings issued - 41
2. Number of warnings with typhoon intensity - 27
3. Total distance traveled during tropical warning period - 3565 mi

B. Characteristics as a typhoon

1. Minimum observed SLP - 940mbs at 040300Z
2. Minimum observed 700mb height - 2522m. at 040850Z
3. Maximum surface wind - 140 kts (From Best Track)
4. Maximum radius of surface circulation - 625 mi

II. DEVELOPMENT

A. Initial impetus - Surge in trades followed by movement south of a deep Polar trough which prevented development by differential steering of surface and mid level vortices. When the system moved west of the Polar trough and under 200mb divergence, the typhoon developed.

B. Initial surface vortex

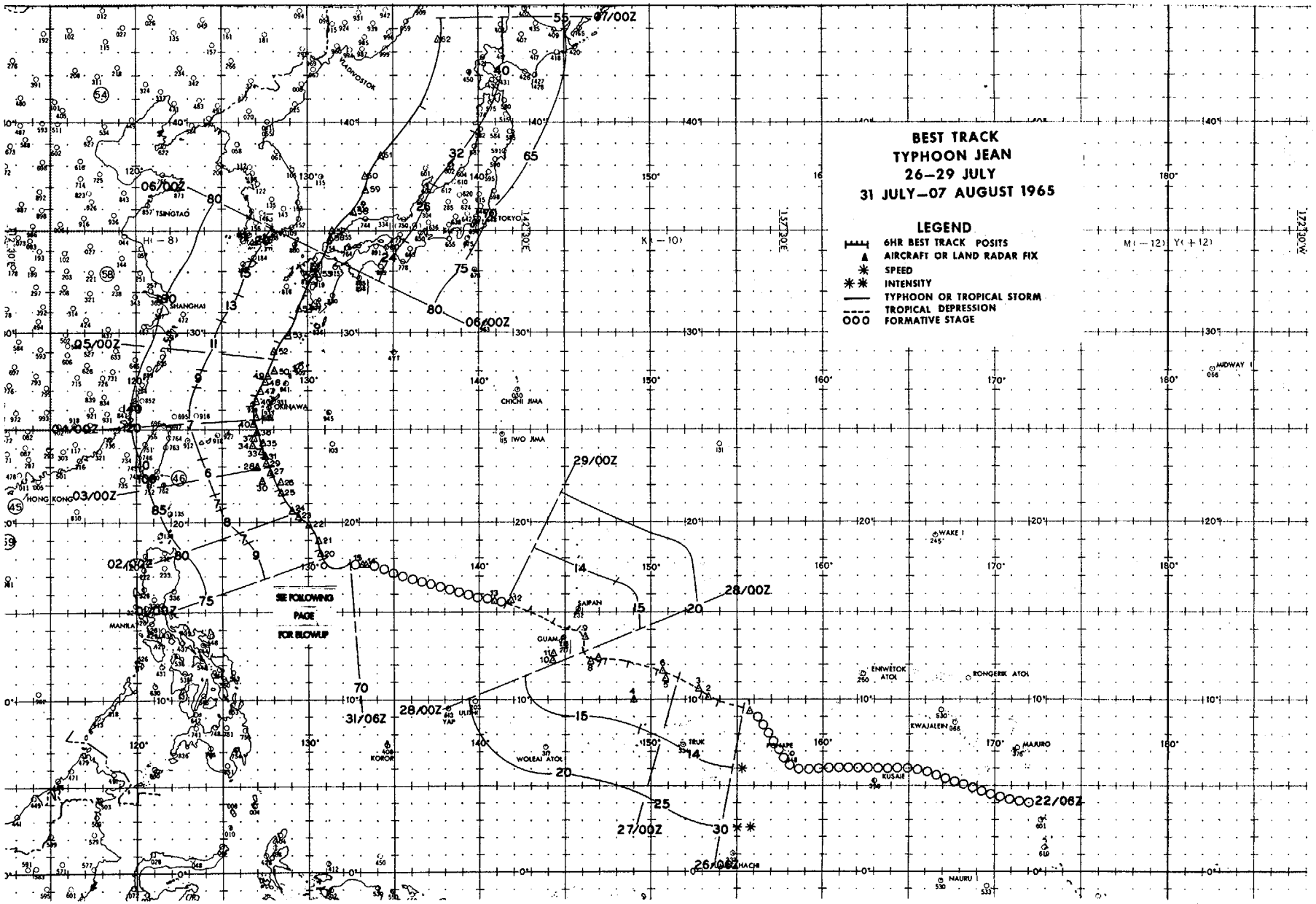
1. Junction vortex at 220600Z
2. Surface pressure less than 1008mbs

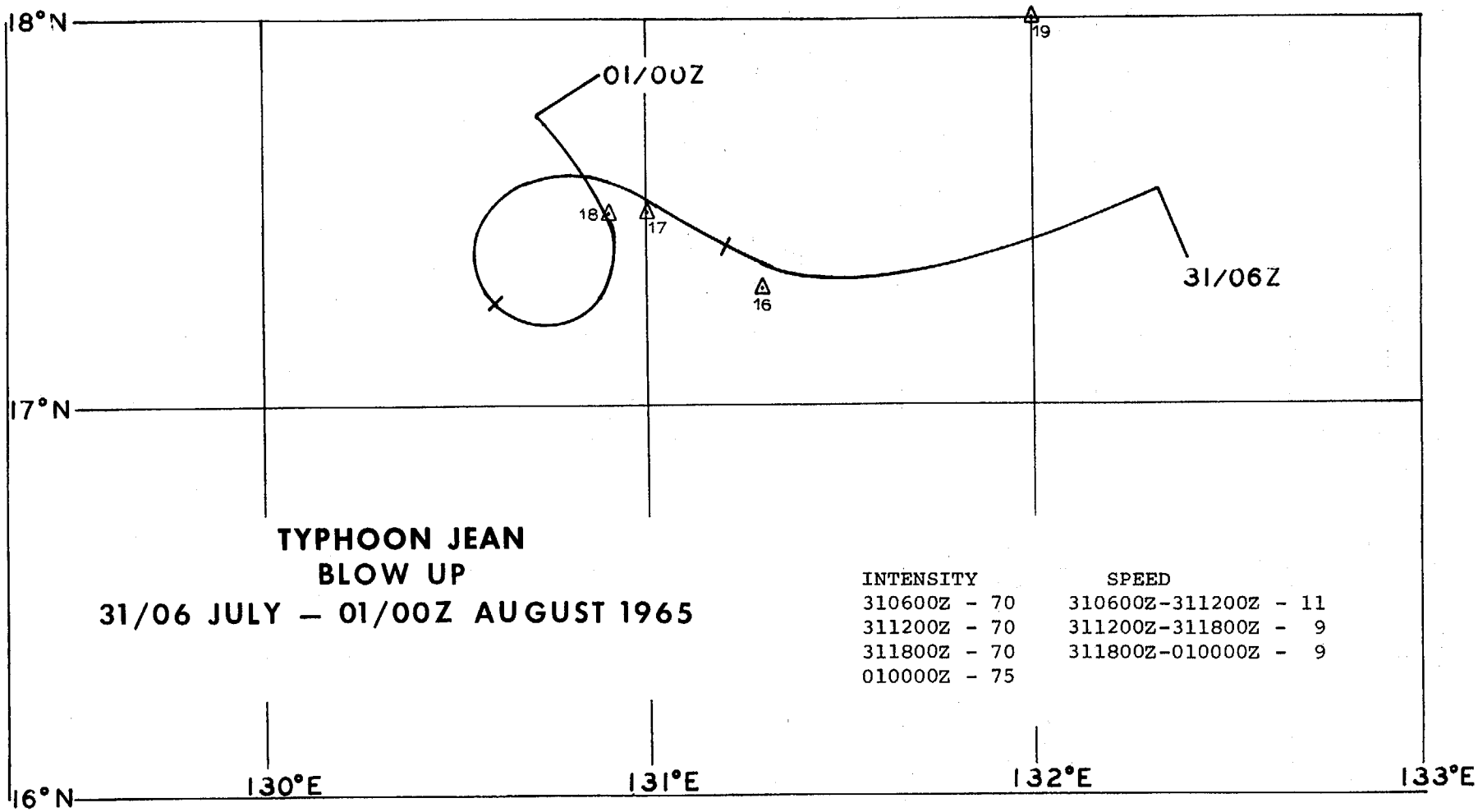
C. 200mb flow above surface vortex

1. Initial - northeasterly
2. Upon reaching typhoon intensity - northeasterly divergent flow

III. FINAL DISPOSITION

A. Became extratropical


BEST TRACK
TYPHOON JEAN
26–29 JULY
31 JULY–07 AUGUST 1965
LEGEND
6HR BEST TRACK POSITS
AIRCRAFT OR LAND RADAR FIX
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
FORMATIVE STAGE
SEE FOLLOWING PAGE FOR BLOWUP
07/00Z
06/00Z
05/00Z
04/00Z
03/00Z
02/00Z
01/00Z
29/00Z
28/00Z
31/06Z
27/00Z
26/06Z
22/06Z
VLADIVOSTOK
TSINGTAO
SHANGHAI
OKINAWA
HONG KONG
MANILA
TOKYO
CHICHI JIMA
IWO JIMA
SAIPAN
GUAM
YAP
ULITHI
KOROR
WOLEAI ATOL
TRUK
PEMPE
KUSAIE
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
MAJURO
NAURU
WAKE I
MIDWAY I
H(−8)
K(−10)
M(−12)
Y(+12)
142°30'E
157°30'E
172°30'W




**TYPHOON JEAN**
**BLOW UP**
**31/06 JULY — 01/00Z AUGUST 1965**

| INTENSITY | SPEED |
|---|---|
| 310600Z - 70 | 310600Z-311200Z - 11 |
| 311200Z - 70 | 311200Z-311800Z - 9 |
| 311800Z - 70 | 311800Z-010000Z - 9 |
| 010000Z - 75 | |

EYE FIXES TYPHOON JEAN

| FIX NO. | TIME | POSIT | UNIT-METHOD -ACCY | FLT LVL | FLT LVL WND | OBS SFC WND | OBS MIN SLP | MIN 700MB HGT | FLT LVL TT/TD | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 260317Z | 09.3N 155.8E | 56-P-P6 | 1500ft | 29 | 25 | 1003 | 3124 | 25/-- | EYE CIRC 20 MI DIA |
| 2 | 261502Z | 10.1N 153.3E | VW1-P-P5 | 1450ft | 40 | -- | 1001 | 3030 | 12/05 | EYE CIRC 30 MI DIA MAX TOPS EXCEED 40000 FT |
| 3 | 262304Z | 10.5N 152.6E | 56-P-F10 | 953mb | 22 | 20 | 1005 | --- | 24/21 | EYE INDEF |
| 4 | 270105Z | 10.0N 149.0E | TIROS | -- | -- | -- | -- | --- | --/-- | STAGE B, DIA X, BNDS X. CIRC OVC AREA APPROX 4 DEG DIA |
| 5 | 270250Z | 11.2N 150.9E | 56-P-F10 | 955mb | 22 | 20 | 1002 | --- | 25/21 | EYE INDEF |
| 6 | 270845Z | 11.6N 150.7E | VW1-P-F5 | 1500ft | 25 | 18 | 1000 | --- | --/-- | VIS VORTEX ONLY |
| 7 | 271538Z | 12.3N 147.0E | VW1-P-LU | 1500ft | -- | -- | -- | --- | --/-- | APPARENT VIS VORTEX THIS POSIT |
| 8 | 272245Z | 12.1N 146.5E | 56-P-P4 | 700mb | 20 | 12 | 1005 | 3112 | 11/08 | CNTR CIRC 25 MI DIA |
| 9 | 280300Z | 13.5N 146.1E | 56-P-P4 | 412M | 16 | 15 | 1005 | --- | 24/20 | NEG EYE NO INDICATION OTHER THAN LGT SFC WND |
| 10 | 280400Z | 12.1N 144.3E | LND RDR | -- | -- | -- | -- | --- | --/-- | SANTA ROSA RDR |
| 11 | 280630Z | 12.5N 144.3E | LND RDR | -- | -- | -- | -- | --- | --/-- | SANTA ROSA RDR |
| 12 | 282330Z | 15.6N 141.8E | 56-P-L3 | 953mb | 21 | 18 | 1003 | --- | 25/22 | EYE INDEF CLSD SFC CIRC ELONG E-W |
| 13 | 290250Z | 15.5N 140.9E | 56-P-L1 | 951mb | 22 | 20 | 1003 | --- | 25/21 | EYE INDEF SFC CIRC CLSD VERY ELONG E-W |

| FIX NO. | TIME | POSIT | UNIT-METHOD-ACCY | FLT LVL | FLT LVL WND | OBS SFC WND | OBS MIN SLP | MIN 700MB HGT | FLT LVL TT/TD | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 310125Z | 17.6N 133.4E | 54-P-P3 | 700mb | 30 | 65 | 995 | 3027 | 12/12 | EYE CIRC 30 MI DIA |
| 15 | 310240Z | 17.6N 133.2E | 54-P-P5 | 700mb | 30 | 70 | 996 | 3027 | 12/11 | EYE CIRC 30 MI DIA |
| 16 | 311110Z | 17.3N 131.3E | VW1-P-P5 | 265M | -- | -- | 989 | --- | 25/19 | EYE ELIP 13 X 7 N-S |
| 17 | 311425Z | 17.5N 131.0E | VW1-R-P10 | 700mb | -- | -- | -- | --- | --/-- | EYE ELIP 15 X 10 N-S |
| 18 | 312150Z | 17.5N 130.9E | 56-P-P2 | 700mb | 58 | 65 | 987 | 2987 | 12/11 | EYE CIRC 23 MI DIA SFC & 700MB WND CNTR VERTICAL, RDR EYE BEARS 220/06 MI |
| 19 | 010158Z | 18.0N 132.0E | TIROS | -- | -- | -- | -- | --- | --/-- | STAGE X, DIA 4, BNDS 3 |
| 20 | 010300Z | 18.2N 130.6E | 56-P-P2 | 700mb | 60 | 75 | 984 | 2957 | --/-- | 700MB WND CNTR 060/12 MI FM SFC CNTR |
| 21 | 010901Z | 18.9N 130.5E | VW1-P-P3 | 946mb | 60 | 60 | 982 | --- | --/-- | NO WALL CLD FDR BNDS ALL QUADS |
| 22 | 011445Z | 19.9N 130.0E | VW1-P-P2 | 698mb | 70 | -- | -- | 2980 | 12/04 | CNTR CIRC 20 MI DIA |
| 23 | 012100Z | 20.2N 129.4E | 56-P-P2 | 700mb | 60 | 75 | 980 | 2929 | 15/10 | EYE CIRC 40 MI DIA OPEN W-N-E SOLID E-S-W |
| 24 | 020200Z | 20.6N 129.0E | 56-P-P3 | 700mb | 55 | 80 | 979 | 2910 | 12/12 | EYE CIRC 10 MI DIA SOLID ALL QUADS |
| 25 | 020900Z | 21.5N 128.5E | VW1-R-P3 | 955mb | -- | 60 | -- | --- | --/-- | EYE CIRC 2 MI DIA SHAPE LIKE FIGURE SIX OPEN NE |
| 26 | 021447Z | 22.1N 128.3E | VW1-R-P5 | 850mb | -- | -- | -- | --- | --/-- | EYE CIRC 3 MI DIA FDR BNDS ALL QUADS |
| 27 | 022215Z | 22.7N 127.8E | 56-P-P2 | 700mb | 60 | 70 | 959 | 2829 | 20/14 | EYE CIRC 20 MI DIA WALL CLD S & W |

| FIX NO. | TIME | POSIT | UNIT-METHOD-ACCY | FLT LVL | FLT LVL WND | OBS SFC WND | OBS MIN SLP | MIN 700MB HGT | FLT LVL TT/TD | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 28 | 030240Z | 23.0N 127.0E | TIROS | -- | -- | -- | -- | --- | --/-- | STAGE X, DIA 4, BNDS 3 PLUS |
| 29 | 030300Z | 23.2N 127.5E | 56-P-P2 | 700mb | 70 | 80 | 967 | 2819 | 20/11 | EYE CIRC 20 MI DIA |
| 30 | 030358Z | 22.2N 127.2E | LND RDR | -- | -- | -- | -- | --- | --/-- | KADENA RDR |
| 31 | 030710Z | 23.4N 127.5E | LND RDR | -- | -- | -- | -- | --- | --/-- | KADENA RDR |
| 32 | 030915Z | 23.7N 127.5E | VW1-R-P5 | 700mb | -- | 110 | -- | --- | --/-- | EYE ELIP N-S 13 X 10 MI WALL CLD SOLID ALL QUADS |
| 33 | 031040Z | 23.8N 127.3E | LND RDR | -- | -- | -- | -- | --- | --/-- | |
| 34 | 031200Z | 24.1N 126.8E | LND RDR | -- | -- | -- | -- | --- | --/-- | |
| 35 | 031445Z | 24.3N 127.3E | VW1-R-F5 | 700mb | -- | -- | -- | --- | --/-- | EYE CIRC 8 MI DIA POORLY DEFINED |
| 36 | 031538Z | 24.2N 127.0E | LND RDR | -- | -- | -- | -- | --- | --/-- | |
| 37 | 031808Z | 24.4N 126.9E | LND RDR | -- | -- | -- | -- | --- | --/-- | KADENA RDR |
| 38 | 032000Z | 24.8N 127.0E | LND RDR | -- | -- | -- | -- | --- | --/-- | MIYAKO JIMA RDR |
| 39 | 032100Z | 25.0N 127.0E | 56-P-P1 | 700mb | 80 | -- | 958 | 2740 | 19/13 | EYE CIRC 30 MI DIA WALL CLDS OPEN N SOLID ALL OTHER QUADS |
| 40 | 032300Z | 25.2N 126.9E | LND RDR | -- | -- | -- | -- | --- | --/-- | MIYAKO JIMA RDR |
| 41 | 040000Z | 25.4N 126.8E | LND RDR | -- | -- | -- | -- | --- | --/-- | MIYAKO JIMA RDR |
| 42 | 040212Z | 25.5N 127.0E | TIROS | -- | -- | -- | -- | --- | --/-- | STAGE X, DIA 4, BNDS 4 EYE VSBL |
| 43 | 040300Z | 25.7N 126.8E | 56-P-P3 | 700mb | 70 | 140 | 940 | 2679 | 19/13 | EYE CIRC 30 MI DIA WALL CLDS SOLID ALL QUADS XCPT N 10 MI THICK |

| FIX NO. | TIME | POSIT | UNIT-METHOD -ACCY | FLT LVL | FLT LVL WND | OBS SFC WND | OBS MIN SLP | MIN 700MB HGT | FLT LVL TT/TD | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 44 | 040417Z | 25.8N 127.0E | LND RDR | -- | -- | -- | -- | --- | --/-- | KADENA RDR |
| 45 | 040723Z | 26.1N 127.0E | LND RDR | -- | -- | -- | -- | --- | --/-- | KADENA RDR |
| 46 | 040850Z | 26.4N 127.0E | VW1-P-P2 | 688mb | 58 | 100 | -- | 2522 | 21/12 | EYE ELIP NE-SW 27 X 23 MI |
| 47 | 041445Z | 27.0N 127.1E | VW1-R-P10 | 700mb | 40 | -- | -- | --- | --/-- | EYE CIRC 16 MI DIA WALL CLD SEMI CIRCLE ONLY 13 MI THICK |
| 48 | 041537Z | 27.4N 127.4E | LND RDR | -- | -- | -- | -- | --- | --/-- | KADENA RDR |
| 49 | 041915Z | 27.7N 127.6E | LND RDR | -- | -- | -- | -- | --- | --/-- | OKINO & KUMI SHIMA RDRS |
| 50 | 042100Z | 28.0N 128.0E | LND RDR | -- | -- | -- | -- | --- | --/-- | OKINO & KUMI SHIMA RDRS |
| 51 | 042145Z | 28.2N 127.9E | 56-P-P2 | 700mb | 78 | 150 | 950 | 2661 | 19/15 | EYE CIRC 35 MI DIA |
| 52 | 050230Z | 29.0N 128.0E | 56-P-P10 | 700mb | 70 | 125 | 945 | 2634 | 19/14 | EYE CIRC 20 MI DIA |
| 53 | 050900Z | 29.9N 128.9E | VW1-R-P2 | 800ft | -- | -- | -- | --- | --/-- | EYE CIRC 22 MI DIA MAIN FDR BNDS SE THROUGH SW |
| 54 | 051445Z | 31.2N 129.5E | VW1-R-P1 | 700mb | -- | -- | -- | --- | --/-- | EYE CIRC 20 MI DIA WALL CLD WK N QUAD |
| 55 | 052115Z | 32.8N 130.5E | 56-P-P2 | 500mb | 80 | 130 | -- | --- | -04/-04 | RDR EYE 100 DEG 12 MI FM 500MB EYE FIXED |
| 56 | 060230Z | 34.7N 131.3E | LND RDR | -- | -- | -- | -- | --- | --/-- | KASUGA RDR |
| 57 | 060300Z | 35.0N 131.4E | 56-P-P2 | 500mb | 60 | 80 | -- | --- | --/-- | FLT LVL CNTR FIXED NO RDR EYE |
| 58 | 060600Z | 35.8N 132.7E | LND RDR | -- | -- | -- | -- | --- | --/-- | KASUGA RDR |

| FIX NO. | TIME | POSIT | UNIT-METHOD-ACCY | FLT LVL | FLT LVL WND | OBS SFC WND | OBS MIN SLP | MIN 700MB HGT | FLT LVL TT/TD | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 59 | 060913Z | 36.9N 133.4E | VW1-R-F2 | 708mb | -- | -- | -- | --- | --/-- | EYE CIRC 23 MI DIA WALL CLD OPEN N & S, NOT WELL DEFINED |
| 60 | 061019Z | 37.5N 133.4E | VW1-P-P1 | 708mb | 60 | -- | -- | 2923 | 13/10 | EYE CIRC 10 MI DIA NOT WELL ORGANIZED |
| 61 | 061231Z | 38.3N 134.3E | VW1-R-U | -- | -- | -- | -- | --- | --/-- | POORLY DEFINED RDR EYE |
| 62 | 062225Z | 43.6N 137.7E | 54-R-U | -- | -- | 55 | -- | --- | --/-- | |

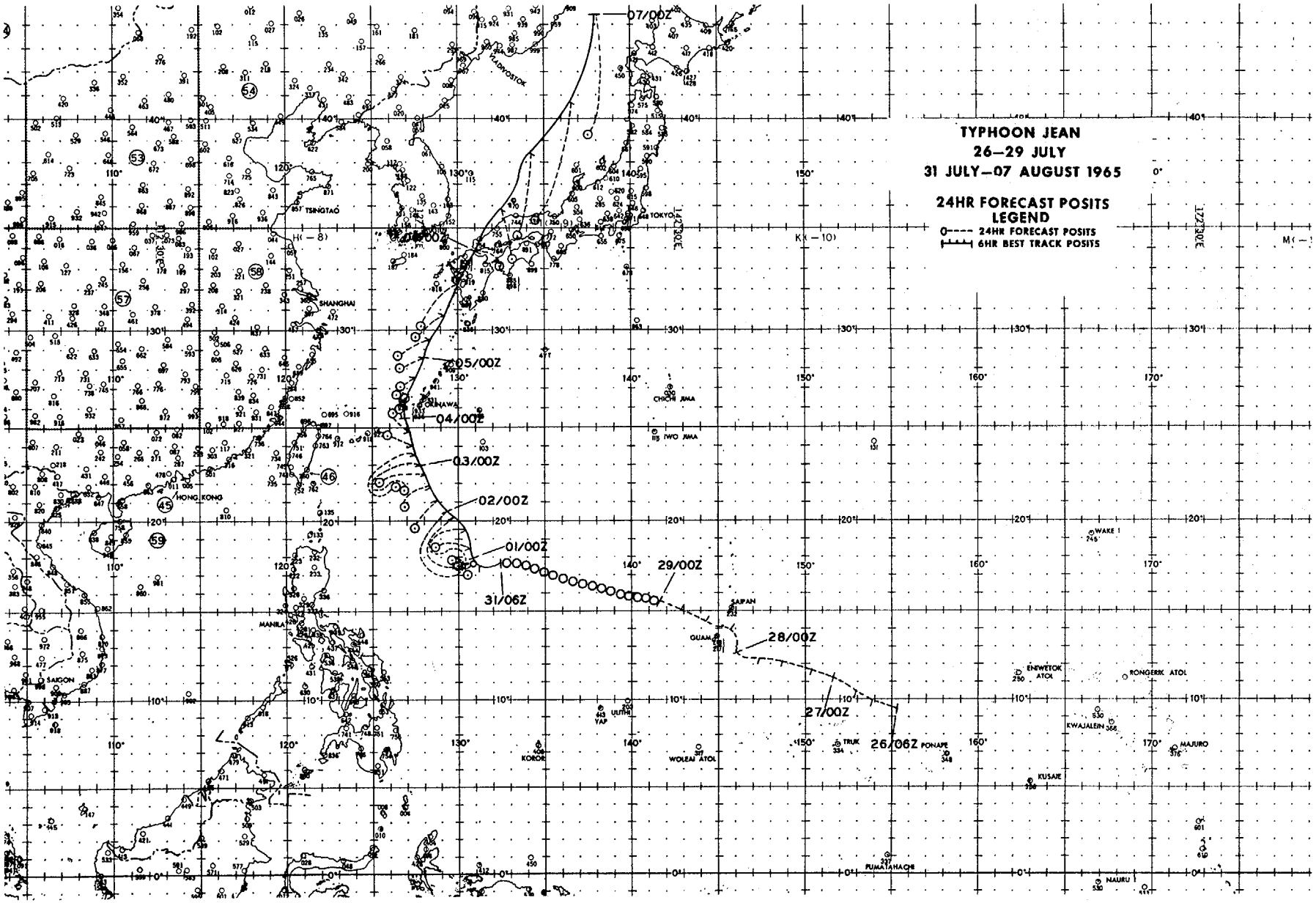
TYPHOON JEAN 26 JULY-07 AUG 1965
POSITION AND FORECAST VERIFICATION DATA

| DTG | STORM POSITION LAT. | LONG. | 24 HOUR ERROR DEG. DISTANCE | 48 HOUR ERROR DEG. DISTANCE |
|---|---|---|---|---|
| 260600Z | 09.5N | 155.3E | ------ | ------ |
| 261200Z | 09.9N | 153.9E | ------ | ------ |
| 261800Z | 10.5N | 152.7E | ------ | ------ |
| 270000Z | 11.2N | 151.6E | ------ | ------ |
| 270600Z | 11.7N | 150.3E | ------ | ------ |
| 271200Z | 12.1N | 148.8E | ------ | ------ |
| 271800Z | 12.3N | 147.4E | ------ | ------ |
| 280000Z | 12.7N | 146.0E | ------ | ------ |
| 280600Z | 14.0N | 145.5E | ------ | ------ |
| 281200Z | 14.4N | 144.2E | ------ | ------ |
| 281800Z | 15.0N | 142.9E | ------ | ------ |
| 290000Z | 15.4N | 141.5E | ------ | ------ |
| 310600Z | 17.6N | 132.3E | ------ | ------ |
| 311200Z | 17.4N | 131.2E | ------ | ------ |
| 311800Z | 17.5N | 131.0E | ------ | ------ |
| 010000Z | 17.8N | 130.8E | ------ | ------ |
| 010600Z | 18.6N | 130.5E | 268-100 | ------ |
| 011200Z | 19.5N | 130.4E | 179-148 | ------ |
| 011800Z | 20.1N | 129.7E | 175-160 | ------ |
| 020000Z | 20.4N | 129.2E | 166-160 | ------ |
| 020600Z | 21.1N | 128.6E | 217-114 | 237-275 |
| 021200Z | 21.8N | 128.3E | 234-100 | 196-290 |
| 021800Z | 22.4N | 128.0E | 261-150 | 197-317 |
| 030000Z | 22.9N | 127.7E | 204-95 | 200-261 |
| 030600Z | 23.5N | 127.5E | 212-114 | 242-303 |
| 031200Z | 24.0N | 127.3E | 291-93 | 242-286 |
| 031800Z | 24.8N | 127.1E | 323-72 | 262-337 |
| 040000Z | 25.4N | 126.9E | 344-33 | 217-187 |
| 040600Z | 26.1N | 126.8E | 321-36 | 231-209 |
| 041200Z | 26.7N | 127.1E | 210-34 | 308-160 |
| 041800Z | 27.6N | 127.4E | 230-57 | 322-152 |
| 050000Z | 28.6N | 128.0E | 248-88 | 282-92 |
| 050600Z | 29.6N | 128.4E | 243-122 | 296-120 |
| 051200Z | 30.7N | 129.3E | 234-112 | 230-196 |
| 051800Z | 32.1N | 130.0E | 222-162 | 228-257 |

TYPHOON JEAN 26 JULY-07 AUG 1965
POSITION AND FORECAST VERIFICATION DATA (CONT'D)

| DTG | STORM POSITION LAT. | LONG. | 24 HOUR ERROR DEG. DISTANCE | 48 HOUR ERROR DEG. DISTANCE |
|---|---|---|---|---|
| 060000Z | 33.8N | 131.0E | 123-90 | 241-251 |
| 060600Z | 35.8N | 132.5E | 170-150 | 237-308 |
| 061200Z | 38.3N | 134.1E | 189-222 | 218-418 |
| 061800Z | 40.7N | 136.5E | 198-330 | 215-580 |
| 070000Z | 44.5N | 137.8E | 183-337 | 162-526 |

AVERAGE 24 HOUR ERROR 128 MI
AVERAGE 48 HOUR ERROR 276 MI


TYPHOON JEAN
26–29 JULY
31 JULY–07 AUGUST 1965
24HR FORECAST POSITS
LEGEND
24HR FORECAST POSITS
6HR BEST TRACK POSITS
07/00Z
05/00Z
04/00Z
03/00Z
02/00Z
01/00Z
31/06Z
29/00Z
28/00Z
27/00Z
26/06Z
VLADIVOSTOK
TSINGTAO
SHANGHAI
TOKYO
OKINAWA
CHICHI JIMA
IWO JIMA
HONG KONG
MANILA
SAIGON
SAIPAN
GUAM
WAKE I
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
MAJURO
KUSAIE
PONAPE
TRUK
WOLEAI ATOL
KOROR
ULITHI
YAP
PUMATAHACHI
NAURU I