BY ORDER OF THE COMMANDER

HEADQUARTERS, UNITED STATES FORCES, JAPAN USFJ INSTRUCTION 15-4001

01 MARCH 2017



Disaster Preparedness

TROPICAL CYCLONE CONDITIONS OF READINESS (TCCOR)

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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Supersedes: USFJ Instruction 15-4001, dated 24 August 2016

PURPOSE: To prescribe policy, provide guidance, assign responsibilities, and establish revised procedures for conduct of Tropical Cyclone Readiness by all U.S. personnel in Japan.

SUMMARY OF CHANGES: References updated. Designated USFJ Commander as responsible for TCCOR to protect U.S. assets in Japan and as the Kanto Plain TCCOR Authority. Included notification of TCCOR status and checklist completion via Service Component Command Centers to the USFJ Joint Operations Center in TCCOR responses. Clarified completion of TCCOR Recovery notification via the Service Component Command Centers to the USFJ Joint Operations Center. Changed TCCOR notification from memo to orders format. Updated checklists to reflect these changes.

- **1. Scope:** This instruction is applicable to all U.S. personnel in Japan under the jurisdiction of, or accountable to, the Department of Defense (DoD).
- **2. General:** In accordance with USPACOM Instruction 0539.1, the Joint Typhoon Warning Center (JTWC) provides tropical cyclone warnings to U.S. military agencies in Japan. Upon receipt of these warnings, TCCOR Authorities, with advice from their weather office of primary responsibility per Attachment 3, will issue TCCOR levels for their areas of responsibility. Upon receipt of these TCCOR declarations, all personnel will take appropriate action to warn, secure, and protect resources and assets.
- 2.1. References.
- 2.1.1. AF Manual 15-129 Volume 1, Air and Space Weather Operations Characterization, 06 December 2011.
- 2.1.2. USPACOM Instruction 0539.1, Tropical Cyclone Operations in U.S. Pacific Command (USPACOM), 25 March 2014.

- 2.1.3. PACAF Instruction 15-101, Weather Support for PACAF, 10 August 2016.
- 2.1.4. Attachment 1 contains a Glossary of Terms and Acronyms applicable to this instruction.
- 2.1.5. Attachment 2 provides a definition for each TCCOR level.
- 3. Responsibilities.
- 3.1 Commander, U.S. Forces, Japan.
- 3.1.1. Maintain overall TCCOR responsibility to protect U.S. assets in Japan, establish TCCOR Operating Areas in Japan, and delegate TCCOR Authority for those Operating Areas to the appropriate level of command.
- 3.1.2. Plan and execute an annual preparedness exercise to test tropical cyclone warning and communication procedures for all Service Components and TCCOR Authorities.
- 3.1.3. Maintain and update USFJ Instruction (USFJI) 15-4001, delegated to the USFJ / J3. This document should be updated every two years, or sooner as required.
- 3.2. USFJ Service Component Commanders.
- 3.2.1. TCCOR Authorities and designated Operating Areas are assigned in Attachment 3. These appointments should be reviewed frequently to ensure coverage and accuracy.
- 3.2.2. Ensure TCCOR Authorities have procedures in place to notify their Component Command and the USFJ Emergency Action Center (EAC) / Joint Operations Center (JOC) of changes to TCCOR for assigned areas of responsibility.
- 3.2.3. Service components will report concurrent ship sortie, aircraft evacuation plans, and execution status of assets.
- 3.3. TCCOR Authorities.
- 3.3.1. TCCOR Authorities and designated Operating Areas are assigned in Attachment 3.
- 3.3.2. Review and approve the locally developed installation Typhoon Notification Procedures. Once complete, send the approved local Typhoon Notification Procedures/plan to the USFJ/J3.
- 3.3.3. Develop procedures for communicating TCCOR status to installations and organizations within assigned areas of responsibility. Publish and coordinate procedures for public dissemination of tropical cyclone information and TCCOR levels. Include procedures for coordinating with the Armed Forces Radio and Television Service (AFRTS) station serving assigned areas of responsibility. Attachment 4 includes some recommended resources and associated contact information.
- 3.3.4. Ensure checklists and procedures for each TCCOR level are developed by installation organizations, and are updated and current. An example checklist for each TCCOR level is provided in Attachment 8.

- 3.3.5. Participate and encourage installations to participate, to the maximum extent possible, in the annual USFJ Tropical Cyclone Preparedness Exercise. See Attachment 7 for the USFJ Exercise Guide.
- 3.3.6. Declare and issue TCCOR declaration messages for assigned Areas of Responsibility. They will report the declaration of a TCCOR, including the conditions and alert levels, to the applicable Service Component Command Centers and the USFJ Command Center in the format provided in Attachment 5.
- 3.3.7. TCCOR declarations should be based on timing to account for the estimated arrival of destructive winds and associated excessive rainfall accumulation, (and for coastal areas, a threatening increase in wave activity), and implementation of protective actions required to counter or prepare for the storm. Issuing TCCOR declarations at the appropriate time should be an integral part of the public notification process.

3.4. USFJ Director of Operations / J3.

- 3.4.1. Develop and maintain procedures for monitoring current tropical cyclone conditions within the USFJ area of responsibility. This plan can exist as a portion of a comprehensive Disaster Preparedness plan.
- 3.4.2. Advise the Commander, USFJ, of tropical cyclone conditions, which may adversely affect units in the USFJ operational areas, and any actions necessary for protection of DoD personnel and resources.
- 3.5. USAF, USMC and USN Weather Facilities Directly Supporting a TCCOR Authority.
- 3.5.1 Develop a local installation Typhoon Notification Plan for supported TCCOR Authority's approval. Develop and implement procedures to ensure typhoon notification is accomplished. This plan can exist as a portion of a comprehensive Disaster Preparedness plan.
- 3.5.2 Generate TCCOR recommendations to supported TCCOR Authority based on advice from responsible forecast agency (e.g. 17 OWS, JTWC).
- 3.5.3 Act as an interface between installation commanders and the responsible forecast agency, and advise the installation commander on all weather related issues.

3.6. US Military Installations in Japan.

3.6.1. Commanders will develop TCCOR checklists to safeguard resources and personnel. Actions taken from checklists are determined by storm timing and projected storm intensity. For example, a TCCOR 2 checklist item *might* read:

"Evacuate all C-130 aircraft (only if forecast wind gusts are > 72 knots)."

If we assume that the generation of a C-130 aircraft takes 12 - 24 hours, then this should be a TCCOR 2 checklist item. Although a storm can meet the minimum strength required for a TCCOR declaration, the forecasted maximum winds will vary for each storm. Therefore, not all TCCOR 2 items may need to be accomplished. In this example, if the winds speeds were never forecast above 72 knots, the evacuation of aircraft would not need to be completed.

- 3.6.1.1. An example of TCCOR level checklists are provided in Attachment 8 of this document.
- 3.6.2. TCCOR declarations should be based on timing to account for the estimated arrival of destructive winds and associated excessive rainfall accumulation, (and for coastal areas, a threatening increase in wave activity, potential storm surge or storm tide), and protective actions required to counter or prepare for the storm. Issuing TCCOR declarations at the appropriate time should be an integral part of the public notification process.
- 3.6.3. Accomplishment of TCCOR checklist items are based on both timing and the storm's forecasted intensity. This enables commanders to execute items selectively, based on estimated storm strength as well as the estimated arrival time of destructive winds.
- 3.6.4. Installation Commanders will ensure that TCCOR procedures cover all personnel and organizations residing on that installation.
- 3.6.5. It is recommended that Installation Commanders, as they deem necessary, develop a plan for the organized release of non-essential military and civilian personnel to be implemented prior to the declaration of TCCOR 1. A comprehensive release plan should include and prioritize those individuals that reside off installation. A staggered release should be initiated within a time that will allow those individuals to reach their residence prior to the declaration of TCCOR 1 CAUTION.
- 3.6.6. Local commanders are responsible for the safety and protection of their service members, families, and facilities. In the event that an installation commander determines that they need a different TCCOR Level declared for their installation than the rest of their respective region, they must coordinate with their designated TCCOR authority (Attachment 3) for approval (TCCOR Storm Watch, 5, 4, 3, 2, 1) prior to adjusting TCCOR level. TCCOR 1C, 1E, 1R, All Clear may be delegated to the local installation commander.
- 3.6.7. Each installation within the Japan AOR is required to submit a Post Tropical Cyclone Report within 24 hours of declaration of TCCOR 1 Recovery. The report will be submitted through Service Component Command Centers to the USFJ Command Center at pacom.yokota.usfj.mbx.command-center@mail.mil (DSN 315-233-6065). An example Post Tropical Cyclone Report is provided in Attachment 6.
- 3.6.8. For reports of injury, asset damage, degradation of capabilities or mission, or loss, submit applicable Service reports (e.g. OPREP-3 or SIR) in a timely manner, via Service Component Command Centers to the USFJ Command Center at pacom.yokota.usfi.mbx.command-center@mail.mil, (DSN 315-223-6065).

3.7. Armed Forces Radio and Television Service.

- 3.7.1. Establish a method for the TCCOR Authorities and/or local installation commanders to notify the supporting AFRTS station of TCCOR declarations for the area of responsibility.
- 3.7.2. Coordinate the frequency (in time) in which the TCCOR Authority's supporting meteorological and oceanographic (METOC) unit will provide updates to the supporting AFRTS station.

- 3.7.3. Establish the frequency (in time) at which the supporting AFRTS station will disseminate TCCOR information and tropical cyclone data to the public.
- 3.7.4. Establish the frequency (in time) the supporting AFRTS station will periodically provide public education/awareness broadcast spots concerning TCCOR during the local tropical cyclone season, required and suggested precautionary measures, and other information deemed necessary.
- 3.7.5. AFRTS has permission to use the following radio broadcast frequencies:
- 3.7.5.1. AM 810 and AM 1575 in the Kanto Plain, Sasebo, Iwakuni, and Misawa areas.
- 3.7.5.2. AM 648 and FM 89.1 on Okinawa.
- 4. Tropical Cyclone Conditions of Readiness.
- 4.1. To enhance the safety of individuals by the use of consistent terminology across USFJ installations, the set of standardized TCCOR Program Terminology suggested below and in Attachment 2 should be used to the greatest extent possible in development of all TC notification plans across the Japan AOR.
- 4.1.1. TCCOR is based on the forecasts of tropical cyclone tracks used to determine the onset of TC effects at a particular installation. Destructive winds can occur at any time when associated with a typhoon. In this instruction, destructive winds are defined as sustained winds ≥ 50 knots or gust factors of 60 knots or greater.
- **4.2 Considerations** TCCOR authorities, local commanders and supporting METOC activities must take into consideration geography and other local influences in predicting destructive winds. TCCOR authorities must also consider other potential impacts such as precipitation, flooding and storm surge. Potential warning error or alternate forecast scenarios must be considered. TCCORs 5, 4, and 3 are purposely defined as destructive winds that are "possible" versus "anticipated." This language is intended to account for statistically larger track and intensity errors at 96, 72, and 48 hours respectively and to encourage early situational awareness and precautionary measures by decision-makers.
- **4.3 TCCOR Storm Watch** Strong winds of 35 knots sustained or greater are possible due to the proximity of a tropical cyclone; however, winds are not forecasted to meet the destructive wind criteria (50 knots sustained or gust factors of 60 knots or greater). Personnel should follow Standard Operating Procedures for TCCOR Storm Watch and stay alert for any changes to TCCOR status.
- 4.3.1. Strong winds will meet TCCOR 1 Caution criteria.
- 4.3.2. The storm is also close enough to the area that a heightened alert status is necessary in order to rapidly establish elevated TCCOR conditions should the storm deviate from the forecasted track or intensity.
- 4.3.3. It is possible to return to TCCOR Storm Watch from another TCCOR level if the storm is no longer forecasted to reach destructive wind criteria.
- **4.4 TCCOR 5** Destructive winds are *possible* within 96 hours.

- 4.5 TCCOR 4 Destructive winds are possible within 72 hours.
- 4.6 TCCOR 3 Destructive winds are possible within 48 hours.
- 4.7 TCCOR 2 Destructive winds anticipated within 24 hours.
- 4.8 TCCOR 1 Destructive winds are occurring or anticipated within 12 hours.
- **4.9 TCCOR 1 Caution* -** Winds of 35-49 knots sustained are occurring (at a particular installation).
- **4.10 TCCOR 1 Emergency*** Winds of 50 knots sustained or gust factors of 60 knots or greater are occurring at a particular installation.
- **4.11 TCCOR 1 Recovery*** After the passage of a tropical cyclone (TC), when destructive winds have subsided and are no longer forecasted to occur, survey and work crews are sent out to determine the extent of damage and to establish safe zones around hazards (e.g. downed power lines, unstable structures).
- 4.11.1. Until the recovery process is declared complete (TCCOR All Clear), or the risk of injury and/or damage to personnel and property has been mitigated to a safe level, the general base population would normally be asked to remain indoors.
- **4.12 TCCOR All Clear*** The storm is over and not forecast to return, and recovery efforts are considered complete by the Installation Commander.
- * Note: TCCOR 1 Caution / Emergency / Recovery / All Clear may be delegated to Installation Commanders by the TCCOR Authority.

5. Contact Information for this Instruction. Questions or comments concerning this Instruction should be directed to the Chief, Current Operations Division, J33, U.S. Forces Japan at 315-225-4652 or 315-223-6066.

CHARLES G. CHIAROTTI Major General, USMC Deputy Commander

Attachments:

- 1. Glossary of Terms and Acronyms
- 2. Tropical Cyclone Conditions of Readiness (TCCOR)
- 3. TCCOR Authority and Operating Areas
- 4. Sources of Weather Information

USFJINST 15-4001 24 Aug 2016

- Example TCCOR 2 Declaration Message
 Post Tropical Cyclone Report
 Annual Typhoon Readiness Exercise Guide
 TCCOR Checklist Examples

Glossary of Terms and Acronyms

- A.1.1. Joint Typhoon Warning Center (JTWC): JTWC is a Joint USAF / USN facility located at Pearl Harbor, Hawaii under the command of the U.S. Naval Maritime Forecast Center. JTWC is responsible for issuing tropical cyclone warnings in the USPACOM area west of 180 degree longitude.
- A.1.2. Tropical Cyclone (TC): A warm-core, non-frontal, synoptic-scale cyclone, originating over tropical or subtropical waters, with organized deep convection and a closed surface wind circulation about a well-defined center.
- A.1.3. Tropical Cyclone Condition of Readiness (TCCOR) Authority: The appointed individual who declares and issues TCCOR notifications for assigned areas of responsibility (see Attachment 3 for TCCOR Authorities and Operating Areas).
- A.1.4. *Tropical Disturbance*: A migratory, organized region of convective showers and thunderstorms in the tropics that maintains its identity for at least 24 hours, but has no closed wind circulation.
- A.1.5. *Tropical Depression*: A tropical disturbance in which the closed wind circulation can be identified and the maximum sustained surface wind speed is 33 knots (38 mph) or less.
- A.1.6. *Tropical Storm*: A tropical cyclone in which the maximum sustained surface wind (1-minute mean) speed ranges from 34 to 63 knots (39 to 73 mph).
- A.1.7. *Typhoon*: A tropical cyclone in which the maximum sustained surface wind (1-minute mean) ranges from 64 to 129 knots (74 to 149 mph).
- A.1.8. Super Typhoon: A tropical cyclone in which the maximum sustained surface wind (1-minute mean) speed is 130 knots (150 mph) or greater.
- A.1.9. *Maximum Sustained Surface Wind*: Highest surface wind speed of a tropical cyclone, averaged over a 1-minute period. Note: Sudden temporary increases of wind speeds are called gusts and may be of substantially greater speed (i.e. the maximum sustained winds of 60 knots may include gusts of 85 knots).
- A.1.10. *Destructive Winds*: Winds of 50 knots sustained or gust factors of 60 knots or greater. Destructive winds can typically cause injury to exposed personnel, damage to aircraft, ships, structures and/or facilities.
- A.1.11. Storm Surge: The abnormal rise of water generated by a storm's winds. Storm surge can reach heights well over 20 feet, and can span hundreds of miles of coastline.
- A.1.12. Storm Tide: The water level rise during a storm due to the combination of storm surge and the astronomical tide. The destructive power of storm surge and large battering waves can result in loss of life, structure damage, beach and dune erosion and road and bridge damage along the coast. Storm surge can travel several miles inland. In estuaries and bayous, saltwater intrusion endangers public health and the environment.

Tropical Cyclone Conditions of Readiness (TCCOR)

CONDITION	DEFINITION DEFINITION	
OCHDILION	DEFINITION	RESPONSE - Personnel should remain alert and
Storm Watch	Strong winds of 35 knots sustained or greater are possible due to the proximity of a tropical cyclone; however, winds are not forecasted to meet the destructive wind criteria (50 knots sustained or gust factors of 60 knots or greater). Strong winds will meet TCCOR 1 Caution criteria. The storm is also close enough to the area that a heightened alert status is necessary in order to rapidly establish elevated TCCOR conditions should the storm deviate from the forecast track or intensity.	monitor radio and television, as rapid changes could occur. If high wind conditions exist, personnel should exercise caution while outdoors, and are recommended to remain indoors, if possible. - Report TCCOR Storm Watch declaration and completion of TCCOR Storm Watch checklist via Service Component Command Centers to the USFJ Joint Operations Center
5	Winds of ≥ 50 knots (58 mph) sustained or gusts ≥ 60 knots are possible within 96 hrs	Report TCCOR 5 declaration and completion of TCCOR 5 checklist via Service Component Command Centers to the USFJ Joint Operations Center
4	Winds of ≥ 50 knots (58 mph) sustained or gusts ≥ 60 knots are possible within 72 hrs	Obtain emergency supplies Report TCCOR 4 declaration and completion of TCCOR 4 checklist via Service Component Command Centers to the USFJ Joint Operations Center
3	Winds of ≥ 50 knots (58 mph) sustained or gusts ≥ 60 knots are possible within 48 hrs	 Fill vehicle and grill gas tanks Ensure sufficient money and important documents are easily accessible Report TCCOR 3 declaration and completion of TCCOR 3 checklist via Service Component Command Centers to the USFJ Joint Operations Center
2	Winds of ≥ 50 knots (58 mph) sustained or gusts ≥ 60 knots are possible within 24 hrs	 Secure outside items Identify windows without Mylar Report TCCOR 2 declaration and completion of TCCOR 2 checklist via Service Component Command Centers to the USFJ Joint Operations Center
1	Winds of ≥ 50 knots (58 mph) sustained or gusts ≥ 60 knots are occurring or anticipated within 12 hrs	 Move sensitive items away from windows or cover them with plastic Tape windows without Mylar, if winds forecast to exceed 100 knots (115 mph) Report TCCOR 1 declaration and completion of TCCOR 1 checklist via Service Component Command Centers to the USFJ Joint Operations Center
1 Caution*	Winds of 35 to 49 knots (39 - 56 mph) sustained are occurring	 All non-essential travel is suspended Non-essential personnel should remain indoors Report TCCOR 1 Caution declaration and completion of TCCOR 1 Caution checklist via Service Component Command Centers to the USFJ Joint Operations Center
1 Emergency*	Winds of 50 knots sustained or gust factors of 60 knots or greater are occurring at a particular	- All personnel should stay indoors away from windows

	installation.	- Report TCCOR 1 Emergency declaration and completion of TCCOR 1 Emergency checklist via Service Component Command Centers to the USFJ Joint Operations Center
1 Recovery*	After the passage of a tropical cyclone (TC), when destructive winds have subsided and are no longer forecasted to occur, survey and work crews are sent out to determine the extent of damage and to establish safe zones around hazards (e.g. downed power lines, unstable structures)	 All non-essential personnel should remain indoors while damage assessment and cleanup is accomplished Report TCCOR 1 Recovery declaration and completion of TCCOR 1 recovery checklist via Service Component Command Centers to the USFJ Joint Operations Center Submit Post Tropical Cyclone Report within 24 hours of declaration of TCCOR 1 Recovery to Service Component Command Centers. Within 24 hours of TCCOR 1 Recovery, Service Component Command Centers submit Post Tropical Cyclone Report to USFJ Joint Operations Center Submit applicable Service reports (OPREP-3 or SIR) in a timely manner, via Service Component Command Centers to the USFJ Joint Operations Center
All Clear*	The storm is over and not forecast to return, and recovery efforts are complete.	Resume normal activities Report All Clear via Service Component Command Centers to the USFJ Joint Operations Center

Note: items marked with * may be delegated to the local installation commander by the TCCOR Authority. The wind definitions stated are a guideline. Local commanders can set these conditions as required for the safety and protection of their service members, families, and facilities.

Tropical Cyclone Definitions

Tropical Storm	Tropical cyclone with maximum sustained winds of 34-63 knots (39-73 mph)
Typhoon	Tropical cyclone with maximum sustained winds of 64-129 knots (74-149 mph)
Super Typhoon	Tropical cyclone with maximum sustained winds of 130 knots (150 mph) or greater

TCCOR Authority and Operating Areas

TCCOR Authority	OPR	Area
Commander, 18th Wing	18 OSS/OSW	Okinawa Island: All DoD installations on Okinawa
Commanding Officer, Iwakuni Marine Corps Air Station (MCAS)	MCAS Iwakuni Weather Branch	Iwakuni Area: Iwakuni Kure Pier No. 6 Akizuki Ammunition Depot Hiro Ammunition Depot Kawakami Ammunition Depot Haigamine Communications Site Sofu Communications Site Kyoga-Misaki Communications Site
Commander, Naval Forces Japan	Naval Oceanography ASW Center, Yokosuka (NOAC)	Yokosuka Area: Yokosuka Yokohama Sasebo Area: Sasebo Yokose POL Depot Tsushima Communications SiteIwo To (when US Forces are on island)
Commander, U.S. Forces Japan	374 OSS/OSW	Kanto Plain: Yokota AB Camp Fuji Camp Zama Naval Air Facility Atsugi
Commander, 35th Fighter Wing	35 OSS/OSW	Misawa Area: Misawa Hachinohe POL Depot Shariki Communications Site

^{*} Note: All off-base military housing areas are included with their serving installations.

Sources of Weather Information

Television / Radio / Telephone:

- AFN Radio Station

EAGLE 810 AM and AM 1575 in the Kanto Plain, Sasebo, Iwakuni, and Misawa areas AM 648 and FM 89.1 on Okinawa

- AFN TV Channels
- Commander's Access Channels / Weather Channels

- Weather Recordings / Stations

Yokota AB 225-7213

Kadena AB 634-3129 / 3140 Misawa AB 226-3900 / 3065

NAF Atsugi 264-3208
Fleet Activities Yokosuka 243-5595
Fleet Activities Sasebo 252-3034
MCAS Iwakuni 253-3005

Internet Websites:

US Navy

Yokosuka: http://163.251.239.142/public/home.aspx?site=1

Sasebo:

http://www.cnic.navy.mil/Sasebo/OperationsAndManagement/EmergencyManagement/index.htm

US Air Force

17 OWS: https://17ows.hickam.af.mil/

US Army

Camp Zama (USAG-J):

http://www.usagj.jp.pac.army.mil/organization/dptms/localconditions/index.aspx

US Marine Corps

MCAS Iwakuni:

http://www.iwakuni.usmc.mil/organizations/station/weather/

MCAS Futenma:

IIIMEF:

http://www.iiimef.marines.mil/

Japan Meteorological Agency: http://www.jma.go.jp/jma/en/menu.html

Joint Typhoon Warning Center: http://www.usno.navy.mil/JTWC/

Example TCCOR Declaration Message

10 Oct 2014

MEMORANDUM FOR US Forces Japan Installations and Personnel in the Kanto Plain

FROM: USFJ/J3

SUBJECT: Typhoon 19W (Vongfong) - TCCOR Storm Watch

1. As of Friday, 10 October 2014, 1500 hrs Japan Standard Time (JST), U.S. military installations within the Kanto Plain shall assume the following TCCOR level:

Yokota AB: Storm Watch Camp Zama: Storm Watch Atsugi NAF: Storm Watch Camp Fuji: Storm Watch

- 2. Based on the Joint Typhoon Warning Center's Forecast, Typhoon 19W is located approximately 313 nautical miles SSE of Kadena AB, Japan. At this time, the storm is estimated to have sustained winds of 125 knots gusting to 150 knots (144 miles per hour gusting to 173 miles per hour) near its center and is moving toward the N at 7 knots (8 miles per hour).
- 3. The potential exists for winds of 35 knots sustained gusting to 50 knots to occur in the Kanto Plain, starting late Monday, 13 October 2014 lasting until Tuesday morning, 14 October 2014.
- 4. Definition of TCCOR Storm Watch: Strong winds of 35 knots sustained or greater are possible due to the proximity of a tropical cyclone; however, winds are not forecasted to meet the destructive wind criteria (50 knots sustained or gust factors of 60 knots or greater). Strong winds will meet TCCOR 1 Caution criteria. The storm is also close enough to the area that a heightened alert status is necessary in order to rapidly establish elevated TCCOR conditions should the storm deviate from the forecast track or intensity.
- 5. Duty stations are directed to implement TCCOR Storm Watch checklists, in accordance with IEMP 10-2, and any other applicable checklists. Personnel and families should stay alert and continue to monitor AFN television and radio announcements as a rapid change to TCCOR conditions could occur.
- 6. This message is for Typhoon 19W (Vongfong).

CHARLES G. CHIAROTTI Major General, USMC Deputy Commander

Post Tropical Cyclone Report

Installation Name:	Date of I	Report:
Date/Time Entered: TCCOR Storm Wat	tch	
TCCOR 5	TCCOR 4	
TCCOR 3	TCCOR 2	
TCCOR 1	TCCOR 1 Cau	ution
TCCOR 1 Emergency	TCCOR 1 Rec	covery
TCCOR All Clear		
Evacuations: # Aircraft	_# Ships	# Personnel
*Highest Wind Speed Recorded	(kt) Date/Time	
*Date/Time Cross Wind ≥ 15 kt Began _		Ended
*Date/Time Cross Wind ≥ 25 kt Began _		Ended
*Date/Time Wind Speed ≥ 35 kt Began _		Ended
*Date/Time Wind Speed ≥ 50 kt Began _	 	Ended
Estimated Amount / Type of Damage (\$, t	trees downed, building	s damaged etc.):
	-	
Miscellaneous Remarks		

* Note: Installations that do not possess certified wind measuring equipment are exempt from reporting wind data.

Send report to the USFJ command Center at <u>pacom.yokota.usfj.mbx.command-center@mail.mil</u> (DSN 315-223-6065).

Annual Typhoon Readiness Exercise Guide

- **A.1. General.** Exercise TYPHOON READY is an annual HQ USFJ sponsored Joint Command Post Exercise (CPX) designed to increase tropical cyclone preparedness. All Service Component headquarters and TCCOR Authorities will participate. Installations are also highly encouraged to participate.
- A.1.1. The Joint training objectives for the exercise are as follows:
- A.1.1.1. Test and evaluate the adequacy of TCCOR warning and notification procedures.
- A.1.1.2. Review and evaluate adequacy of TCCOR checklists and implementation procedures.
- A.1.1.3. Increase public awareness of tropical cyclone threats and recommended preparatory measures.
- A.1.1.4. Test communication lines and assets for information dissemination.
- A.1.2. COMUSJAPAN will coordinate and disseminate exercise plans and execution dates via the USFJ / J37.
- A.1.3. The annual exercise will normally occur between 01 April and 31 May.
- A.1.4. USFJ / J3 will coordinate with 374 OSS/OSW and JTWC to arrange preparation of the Exercise TYPHOON READY scenario and dissemination of simulated warning messages.

A.2. Exercise Guidelines.

- A.2.1. Based on the scripted typhoon scenario, TCCOR Authorities will declare the following TCCOR: 4, 3, 2, 1, 1 Caution, 1 Emergency, 1 Recovery, and All Clear. Following declaration of All Clear installation commanders will submit an Exercise Post Tropical Cyclone Report (after declaration of TCCOR 1 All Clear). Report will be submitted through Service Component Command Centers to the TCCOR Authority and the USFJ Command Center at pacom.yokota.usfj.mbx.command-center@mail.mil, (DSN 315-233-6065). An example Post Tropical Cyclone Report is provided in Attachment 6. Once submitted, commanders will terminate CPX participation.
- A.2.2. Typhoon movement and intensity will be scripted, allowing TCCOR declarations to occur Monday through Friday during normal duty hours (0700-1700). TCCOR Authorities may adjust the TCCOR declaration times for their areas to satisfy local exercise training objectives.
- A.2.3. The direction and speed of the typhoon movements should be extrapolated, as required, between issue times for exercise warning messages to determine appropriate times for TCCOR declarations.
- A.2.4. The duration of the exercise for each installation should not exceed 4 days (not to include weekends) to allow sufficient time to simulate the movement of a typhoon affecting the installation.

A.3. Exercise Planning.

A.3.1. **USFJ / J3** will:

- A.3.1.1. Coordinate the annual exercise planning with representatives from participating Service Components and AFRTS. A planning conference will be held via VTC, telephone conference call or by other methods. This planning conference should take place NLT 01 February of each year.
- A.3.1.2. The agenda for this planning will normally include the following topics:
- A.3.1.2.1. Problem areas or suggested improvements from the previous year's exercise After Action Report.
- A.3.1.2.2. Recent changes to USFJI 15-4001 and other applicable instructions.
- A.3.1.2.3. Proposed exercise plan and dates for the current year's exercise.
- A.3.1.2.4. Overview of tropical cyclone terminology, climatology, warning, and TCCOR declaration procedures applicable to the Western Pacific Region.
- A.3.1.3. The USFJ / J3 will ensure USFJ Service Components, TCCOR Authorities, and AFRTS are advised via message concerning the approved exercise dates and concept of operations for the current year's exercise.
- A.3.2. USFJ / J3, 374 OSS/OSW, and JTWC will coordinate on the following actions:
- A.3.2.1. Design a simulated typhoon track in accordance with the exercise guidelines listed in this attachment. It may be necessary to incorporate more than one typhoon track in order for all Japan AOR TCCOR Operating Areas to participate in the 4 day exercise, and be able to implement (for exercise) all eight TCCOR levels. This should be coordinated through the USFJ J3 with the 374 OSS/OSW and the JTWC.
- A.3.2.2. Prepare simulated JTWC tropical cyclone warning messages for dissemination of Exercise TYPHOON READY warnings to exercise participants. These warnings will be placed on the JTWC exercise website and clearly marked as an exercise bulletin.
- A.3.2.3. Assist the USFJ J3 in developing the overview of tropical cyclone terminology, climatology, warning, and TCCOR declaration procedures applicable to the Western Pacific Region for the exercise planning conference.
- A.3.3. TCCOR Authorities are encouraged to coordinate with Service Components and Installations in their areas to ensure maximum training.

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A.4. Exercise Play

- A.4.1. All exercise players are required to exercise communication and dissemination processes as close to real world procedures as feasible.
- A.4.2. STARTEX and ENDEX messages will not be issued. STARTEX will be assumed when a TCCOR Authority issues TCCOR 5 for their area of responsibility. ENDEX will be assumed when the installation declares TCCOR All Clear and all required reports are submitted.

A.5. Roles & Responsibilities.

- A.5.1. USFJ / J3 (374 OSS / OSW).
- A.5.1.1. Maintain situational awareness of exercise progression throughout USFJ.
- A.5.1.2. Serve as the tropical cyclone subject matter expert to USFJ.
- A.5.2. TCCOR Authorities.
- A.5.2.1. Responsible for declaring exercise TCCORs for their affected installations.
- A.5.2.2. Will disseminate TCCOR updates, at a minimum, to USFJ / J3, Service Component and USFJ Command Centers.
- A.5.3. Regional Weather Forecast Centers.
- A.5.3.1. Will transmit simulated JTWC warning messages to TCCOR Authorities on a real time basis. Place warnings on applicable web sites and clearly mark as exercise bulletins.
- A.5.4. 17th Operational Weather Squadron and Commander Fleet Activities Yokosuka.
- A.5.4.1. Will produce tropical related products IAW local procedures (i.e. Tropical Cyclone Threat Assessment Product) and timelines.
- A.5.4.2. Coordinate with applicable installations on exercise typhoon related products and processes.
- A.5.5. Service Components and Installations.
- A.5.5.1. Validate local procedures and checklists for each TCCOR condition when declared by the TCCOR authority.
- A.5.5.2. Service Components and Installations are encouraged to conduct natural disaster training and exercises in conjunction with the Exercise TYPHOON READY scenario to maximize training benefits.

	TCCOR STORM WATCH CHECKLIST	
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.	
	NOTE ONLY THE TROPICAL CYCLONE CONDITIONS OF READINESS (TCCOR) AUTHORITY OR AN ALTERNATE TCCOR REPRESENTATIVE SHOULD PROCESS TCCOR INPUT.	
TCCOR STORM WATCH	NOTE STRONG WINDS OF 35 KNOTS SUSTAINED OR GREATER ARE POSSIBLE DUE TO THE PROXIMITY OF A TROPICAL CYCLONE; HOWEVER, WINDS ARE NOT FORECASTED TO MEET THE DESTRUCTIVE WIND CRITERIA (50 KNOTS SUSTAINED OR GUST FACTORS OF 60 KNOTS OR GREATER). STRONG WINDS WILL MEET TCCOR 1 CAUTION CRITERIA. THE STORM IS ALSO CLOSE ENOUGH TO THE AREA THAT A HEIGHTENED ALERT STATUS IS NECESSARY IN ORDER TO RAPIDLY ESTABLISH ELEVATED TCCOR CONDITIONS SHOULD THE STORM DEVIATE FROM THE FORECAST TRACK OR INTENSITY.	
	Commander, U.S. Forces Japan has declared TCCOR STORM WATCH for the Kanto Plain on for Tropical Storm / Typhoon (DD MMM YY at XXXXL) (ID)	
1.	All Personnel should stay alert and continue to monitor television and radio announcements. A rapid change to TCCOR conditions could occur.	
2.	Exit Checklist.	

	TCCOR 5 CHECKLIST	
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.	
	NOTE ONLY THE TROPICAL CYCLONE CONDITIONS OF READINESS (TCCOR) AUTHORITY OR AN ALTERNATE TCCOR REPRESENTATIVE SHOULD PROCESS TCCOR INPUT.	
TCCOR 5	NOTE DESTRUCTIVE WINDS ARE POSSIBLE WITHIN 96 HOURS	
	Commander, U.S. Forces Japan has declared TCCOR 5 for the Kanto Plain on for Tropical Storm / Typhoon (DD MMM YY at XXXXL) (ID)	
	SUSPENSE: Declaration time plus 12 hours.	
1.	On-base personnel monitor AFN radio/television and the Weather Channel on Allied Telesis (Channel 19) for further information on TCCOR.	
2.	Off-base personnel monitor Eagle 810.	
3.	All personnel review USFJ TCCOR 4 actions located on NIPR Portal under references (HOI 15-4001).	
	Obtain Emergency Supplies: Flashlights Batteries Water Portable Radio Non-Perishable Food Items	

	TCCOR 5 CHECKLIST (cont.)	
4.	All Directorates ensure recall, unit contact numbers, and TCCOR Emergency Response Team personnel are current.	
5.	All Directorates review all leave requests and TDYs, as required to ensure identification of personnel that are out of the area.	
6.	All Directorates report completion of USFJ TCCOR 5 actions to USFJ Joint Operations Center	
7.	Exit Checklist.	

	TCCOR 4 CHECKLIST	
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.	
	NOTE ONLY THE TROPICAL CYCLONE CONDITIONS OF READINESS (TCCOR) AUTHORITY OR AN ALTERNATE TCCOR REPRESENTATIVE SHOULD PROCESS TCCOR INPUT.	
TCCOR 4	NOTE DESTRUCTIVE WINDS ARE POSSIBLE WITHIN 72 HOURS	
	Commander, U.S. Forces Japan has declared TCCOR 4 for the Kanto Plain on	
	(DD MMM YY at XXXXL) for Tropical Storm / Typhoon	
	SUSPENSE: Declaration time plus 12 hours.	
1.	On-base personnel monitor AFN radio/television and the Weather Channel on Allied Telesis (Channel 19) for further information on TCCOR.	
2.	Off-base personnel monitor Eagle 810.	
3.	All Directorates ensure USFJ TCCOR 5 actions are complete.	
4.	All Directorates ensure recall, unit contact numbers, and TCCOR Emergency Response Team personnel are current.	
5.	All Directorates review all leave requests and TDYs, as required to ensure identification of personnel that are out of the area.	

6.	All personnel review USFJ TCCOR 3 actions located on NIPR Portal under references (HOI 15-4001).
	Obtain Emergency Supplies:
	☐ Flashlights
	□ Batteries
	□ Water
	□ Portable Radio
	□ Non-Perishable Food Items
7.	All Directorates report completion of USFJ TCCOR 4 actions to
	USFJ Joint Operations Center.
8.	Exit Checklist.

	TCCOR 3 CHECKLIST	
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.	
	NOTE ONLY THE TROPICAL CYCLONE CONDITIONS OF READINESS (TCCOR) AUTHORITY OR AN ALTERNATE TCCOR REPRESENTATIVE SHOULD PROCESS TCCOR INPUT.	
TCCOR 3	NOTE DESTRUCTIVE WINDS ARE POSSIBLE WITHIN 48 HOURS	
	Commander, U.S. Forces Japan has declared TCCOR 3 for the Kanto Plain on for Tropical Storm / Typhoon (DD MMM YY at XXXXL) (ID)	
	SUSPENSE: Declaration time plus 8 hours.	
1.	All Directorates ensure USFJ TCCOR 4 actions are complete.	
2.	All personnel review USFJ TCCOR 2 actions located on NIPR Portal under references (HOI 15-4001) Fill the Following: Vehicle Fuel Tanks Water Containers	
	Ensure Sufficient Money & Important Documents Are Easily Accessible	
3.	All records managers secure all vital records identified on file plans.	
4.	As required, the USFJ Chief of Staff will activate CAT via JOC notification procedures for tropical storm / typhoon preparation.	

	TCCOR 3 CHECKLIST (cont.)
5.	Facility Manager coordinates with USFJ Joint Operations Center to activate the TCCOR Emergency Response Team.
6.	All Directorates compile a list of personnel whose quarters are unoccupied due to leave, TDYs, etc, for securing in TCCOR 2.
7.	All Directorates contact the families of personnel whose sponsor is off-station. Maintain good contact information with the families and identify any possible requirements they may have in the absence of their sponsor.
8.	All Directorates report completion of USFJ TCCOR 3 actions to USFJ Joint Operations Center.
9.	Exit Checklist.

	TCCOR 2 CHECKLIST
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.
	NOTE ONLY THE TROPICAL CYCLONE CONDITIONS OF READINESS (TCCOR) AUTHORITY OR AN ALTERNATE TCCOR REPRESENTATIVE SHOULD PROCESS TCCOR INPUT.
TCCOR 2	NOTE DESTRUCTIVE WINDS ARE ANTICIPATED WITHIN 24 HOURS
	Commander, U.S. Forces Japan has declared TCCOR 2 for the Kanto Plain on for Tropical Storm / Typhoon (ID)
	SUSPENSE: Declaration time plus 4 hours.
1.	All Directorates ensure USFJ TCCOR 3, 4 and 5 actions are complete.
2.	All personnel review USFJ TCCOR 1 actions located on NIPR Portal under references (HOI 15-4001). Secure Outside Items: Grills Furniture Trampolines
	Basketball Goals
3.	As required, the USFJ Chief of Staff will activate CAT via JOC notification procedures for tropical storm / cyclone preparation.

	TCCOR 2 CHECKLIST (cont.)
4.	All Directorates identify POC's responsible for inspection of Directorate work areas. Once identified, forward appointee names to the Facility Manager and the USFJ Joint Operations Center. Appointees will inspect respective Directorate's heating/AC equipment, windows, doors, lights, plumbing, interior areas such as closets, entrances, and office areas. Once completed, inform BLDG 714 Facility Manager of deficiencies. Facility Manager will conduct a final inspection of areas listed as hazardous (see Bldg 714 figures for areas of responsibility).
5.	Facility Manager secures area surrounding BLDG 714. Remove or tie down bike rack, dumpsters, break area tables, and antennas on roof. Inspect exterior areas such as lawns, trees, shrubs, parking lots, and designated smoking areas for safety, cleanliness, and neatness. The Facility Manager will be the overall inspector for BLDG 714 and will assist the appointed POCs with issues concerning the facility, as well as be available to 374 CES personnel for access to facilities and questions about service calls. Conduct final inspection of Directorate's heating/AC equipment, windows, doors, lights, plumbing, closets, stairwells, entrances, hallways, and office areas.
6.	All Directorates unplug and move computer / electrical equipment away from exterior windows. Place trash bags or other protective measures over unmovable electrical items that remain in view of windows.
7.	All Directorates secure the quarters of those personnel who are off-station. Coordinate with the USFJ Joint Operations Center for assistance as required.
8.	All Directorates report completion of USFJ TCCOR 2 actions to USFJ Joint Operations Center.
9.	Exit Checklist.

	TCCOR 1 CHECKLIST
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.
	NOTE ONLY THE TROPICAL CYCLONE CONDITIONS OF READINESS (TCCOR) AUTHORITY OR AN ALTERNATE TCCOR REPRESENTATIVE SHOULD PROCESS TCCOR INPUT.
TCCOR 1	NOTE DESTRUCTIVE WINDS ARE ANTICIPATED WITHIN 12 HOURS
	Commander, U.S. Forces Japan has declared TCCOR 1 for the Kanto Plain on for Tropical Storm / Typhoon (DD MMM YY at XXXXL) (ID)
	SUSPENSE: Declaration time plus 2 hours.
1.	All Directorates ensure USFJ TCCOR 2, 3, 4 and 5 actions are complete.
2.	All Directorates release duty personnel to secure quarters and return to duty as required.
	Move Expensive Items Away From Windows Tape Windows If Winds Are Expected to Exceed 115 MPH
3.	All Directorates secure spaces by locking windows and closing blinds or curtains.
4.	USFJ Chief of Staff, via JOC notification procedures recalls TCCOR Emergency Response Teams or places them on telephone standby, as required.

	TCCOR 1 CHECKLIST (cont.)
5.	All Directorates release non-essential military and civilian personnel. A comprehensive release plan should be executed for those individuals that reside off installation. A staggered release should be executed within a time that will allow those individuals to reach their residence prior to the declaration of TCCOR 1 CAUTION (See Command Staggered Release Plan).
6.	All Directorates report completion of USFJ TCCOR 1 actions to USFJ Joint Operations Center.
7.	Exit Checklist.

	TCCOR 1 CAUTION CHECKLIST
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.
	NOTE INSTALLATION COMMANDERS ARE DELEGATED THE AUTHORITY TO SET TCCOR 1C FOR THEIR INSTALLATIONS.
TCCOR 1 CAUTION	NOTE 35-49 KNOTS SUSTAINED WINDS ARE OCCURING
	Commander, U.S. Forces Japan has declared TCCOR 1 CAUTION for the Kanto Plain on
	for Tropical Storm / Typhoon (DD MMM YY at XXXXL) (ID)
	SUSPENSE: Declaration time plus 1 hour.
1.	All personnel monitor base information channel for updates and restrictions.
	All non-essential travel is suspended.
	All non-essential personnel remain indoors.
	Monitor weather information sources for changes in TCCOR.
2.	All Directorates report completion of USFJ TCCOR 1 CAUTION actions to USFJ Joint Operations Center.
3.	Exit Checklist.

	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.
	NOTE INSTALLATION COMMANDERS ARE DELEGATED THE AUTHORITY TO SET TCCOR 1E FOR THEIR INSTALLATIONS.
	Commander, U.S. Forces Japan has declared TCCOR 1 EMERGENCY for the Kanto Plain on
	SUSPENSE: Declaration time plus 30 minutes.
	DURING THE TROPICAL STORM / TYPHOON: HAZARDOUS CONDITIONS EXIST
1.	All personnel should remain indoors and monitor radio and television broadcasts for emergency actions or changes in TCCOR. Outdoor movement will be restricted to lifesaving responses and mission requirements. All personnel indoors should stay away from windows.
2.	Exit Checklist.

	TCCOR 1 RECOVERY CHECKLIST
	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.
	NOTE INSTALLATION COMMANDERS ARE DELEGATED THE AUTHORITY TO SET TCCOR 1R FOR THEIR INSTALLATIONS.
TCCOR 1 RECOVERY	NOTE DESTRUCTIVE WINDS (WINDS OF 50 KNOTS (58 MPH) SUSTAINED OR GUST FACTORS OF 60 KNOTS OR GREATER) ARE NO LONGER FORECAST TO OCCUR. STRONG WINDS AND/OR GUSTS MAY STILL EXIST.
	Commander, U.S. Forces Japan has declared TCCOR 1 RECOVERY for the Kanto Plain on
	for Tropical Storm / Typhoon (DD MMM YY at XXXXL) (ID)
1.	Facility Manager performs damage assessment of BLDG 714 and reports status to the USFJ Joint Operations Center.
2.	USFJ Chief of Staff via JOC notification procedures recalls TCCOR Emergency Response Teams or places them on telephone standby, as required.
3.	All Non-Essential Personnel remain indoors while damage assessment and clean-up is accomplished.
	Wait for instructions to return to normal activities.
4.	Exit Checklist.

	NOTE THIS CHECKLIST IS AN AID FOR THE TROPICAL CYCLONE CONDITIONS OF READINESS REPRESENTATIVE. REFER TO USFJINST 15-4001 24 AUG 2016 FOR ADDITIONAL INFORMATION AND REQUIREMENTS AS NECESSARY.
	NOTE INSTALLATION COMMANDERS ARE DELEGATED THE AUTHORITY TO SET TCCOR ALL CLEAR FOR THEIR INSTALLATIONS.
	Commander, U.S. Forces Japan has declared TCCOR ALL CLEAR for the Kanto Plain on
	(DD MMM YY at XXXXL) for Tropical Storm / Typhoon
1.	All Personnel resume normal activities.
2.	All Directorates perform damage assessment of assigned work areas and report status to the Facility Manager and USFJ Joint Operations Center.
3.	All Directorates maintain detailed records of resources (supplies, equipment, manpower, etc.) expended during recovery operations.
4.	All Directorates collect data on all actions for a final lessons-learned and forward to USFJ Current Operations.
5.	All Directorates report completion of USFJ ALL CLEAR actions to USFJ Joint Operations Center.
6.	Exit Checklist.