

T&R MANUAL, METOC

APPENDIX C

APPRENTICE METOC ANALYST QUALIFICATION CHECKLIST

RANK: _____ NAME: _____ SSN: _____

METOC INSTRUCTOR: _____ LOCATION: _____

DATE CERTIFICATION BEGAN: _____ METOC CHIEF: _____

DATE QUALIFICATION AWARDED: _____ METOC OFFICER: _____

Tie-in	Description	REQUIREMENT			
		MAI Init	Date	Qual Board	Date
ACP-116	Introduce and demonstrate retention of METOC Standard Operating Procedures (SOP).				
ACP-116a	Local security procedures.				
ACP-116b	Airfield description				
ACP-116c	Watch Routine.				
ACP-116d	METOC equipment				
ACP-116e	Command structure				
ACP-116f	Warning criteria/procedures				

Tie-in	Description	REQUIREMENT			
		MAI Init	Date	Qual Board	Date
ACP-117	Introduce and exhibit retention of METOC missions knowledge.				
ACP-117a	Marine Corps METOC community.				
ACP-117b	Local METOC mission.				
ACP-117c	METOC Analyst Apprentice mission.				
ACP-117d	Airfield Operations.				
ACP-117e	Marine Corps Aviation.				
ACP-117f	Deployable METOC units.				

Tie-in	Description	REQUIREMENT			
		MAI Init	Date	Qual Board	Date
ACP-118	Introduce and exhibit retention of orders and directives governing METOC support.				
ACP-118a	Desktop procedures.				
ACP-118b	NAVMETOCOMINST 3141.2 Surface METAR Observation User's manual.				
ACP-118c	OPNAVINST 3140.24() Warning and Conditions of Readiness.				
ACP-118d	NAVMETOCOMINST 3142.1() Pilot Reports.				
ACP-118e	OPNAVINST 3710.7() NATOPS Manual.				
ACP-118f	Local Destructive Weather Order.				
ACP-118g	MCWP 3-35.7 MAGTF METOC Support.				

T&R MANUAL, METOC

Tie-in	Description	REQUIREMENT			
ACP-119	Introduce and exhibit retention of the Quality Assurance (QA) Program.	MAI Init	Date	Qual Board	Date
ACP-119	Introduce and exhibit retention of the Quality Assurance (QA) Program.				

Tie-in	Description	REQUIREMENT			
ACP-120	Complete security clearance-access request procedures.	MAI Init	Date	Qual Board	Date
ACP-120a	Attend command security indoctrination briefing.				
ACP-120b	Attend required security training as denoted in the references.				
ACP-120c	Complete required paperwork (electronic/manual) required for submission of security clearance request.				
ACP-120d	Define and state the responsibilities pertaining to the Emergency action Plan.				

Tie-in	Description	REQUIREMENT			
ACP-121	Develop and certify knowledge of security requirements.	MAI Init	Date	Qual Board	MAI Init
ACP-121a	Read and comprehend local security standing operating procedures.				
ACP-121b	Define and state responsibilities pertaining to ... 1. Physical security program. 2. Information security program. 3. Personal security program. 4. Communications security program				

Tie-in	Description	REQUIREMENT			
ACP-122	Develop and certify knowledge of communication configurations and procedures.	MAI Init	Date	Qual Board	MAI Init
ACP-122a	Telephone procedures.				
ACP-122b	Telephone access numbers.				
ACP-122c	Command and facsimile numbers.				
ACP-122d	Pilot to METRO frequencies and procedures.				
ACP-122e	Email address and responsibilities.				
ACP-122f	Tower radio/phone procedures.				

T&R MANUAL, METOC

Tie-in	Description	REQUIREMENT			
ACP-123	Develop and certify knowledge of Garrison METOC Equipment.	MAI Init	Date	Qual Board	MAI Init
ACP-123a	Certified knowledge of Garrison METOC Equipment.				

Tie-in	Description	REQUIREMENT			
ACP-124	Develop and certify knowledge of Tactical METOC Equipment.	MAI Init	Date	Qual Board	MAI Init
ACP-124a	Certified knowledge of Tactical METOC Equipment.				

Tie-in	Description	REQUIREMENT			
ACP-125	Develop and certify proficiency at operating knowledge of hand-Held meteorological devices.	MAI Init	Date	Qual Board	MAI Init
ACP-125a	Wind sensing devices.				
ACP-125b	Pressure sensing devices.				
ACP-125c	Temperature sensing devices.				
ACP-125d	Ceiling sensing devices.				
ACP-125e	Lightning detection devices				

Tie-in	Description	REQUIREMENT			
ACP-126	Develop and certify basic knowledge of software applications.	MAI Init	Date	Qual Board	MAI Init
ACP-126a	Tactical decision aids.				
ACP-126b	METOC applications.				
ACP-126c	Command and Control (C2) applications.				
ACP-126d	Geospatial applications.				

Tie-in	Description	REQUIREMENT			
ACP-127	Develop and certify knowledge of locally generated METOC support products.	MAI Init	Date	Qual Board	MAI Init
ACP-127a	Terminal aerodrome forecast.				
ACP-127b	Horizontal weather depiction.				
ACP-127c	Flight Weather Briefing package.				
ACP-127d	DD 175-1 Flight Weather Briefing.				
ACP-127e	Daily Weather Forecast.				
ACP-127f	Chemical Downwind Message.				
ACP-127g	Astronomical Data.				
ACP-127h	Tidal Data.				
ACP-127i	Climatological Data.				
ACP-127j	Surf Forecasts.				
ACP-127k	Surface Observations.				
ACP-127l	Upper Air Observations.				
ACP-127m	Blast forecast.				
ACP-127n	Drop Zone Forecast.				

Tie-in	Description	REQUIREMENT			
ACP-128	Develop and certify proficiency at disseminating procedures for Weather Warnings and Advisories.	MAI Init	Date	Qual Board	MAI Init
ACP-128A	Certified proficiency at disseminating procedures for Weather Warnings and Advisories				

Tie-in	Description	REQUIREMENT			
ACP-129	Develop and certify knowledge of dynamic meteorological fundamentals.	MAI Init	Date	Qual Board	MAI Init
ACP-129a	Earth-sun relationship.				
ACP-129b	Greenhouse effect.				
ACP-129c	Insulation.				
ACP-129d	Inversion.				
ACP-129e	Temperature scales.				
ACP-129f	Climate controls.				
ACP-129g	Air masses.				
ACP-129h	Pressure/density altitude.				
ACP-129i	Synoptic scales features.				
ACP-129j	Stages of tropical systems.				
ACP-129k	Cloud formation.				
ACP-129l	Precipitation.				
ACP-129m	Hydrometers.				
ACP-129n	Litho meters.				
ACP-129o	Electrometers.				
ACP-129p	Photometers.				
ACP-129q	Wind.				
ACP-129r	Tornadoes.				
ACP-129s	Thunderstorm.				
ACP-129t	Synoptic Scale Circulation Patterns				
ACP-129u	Mesoscale and Microscale Circulation				
ACP-129v	Mesoscale and Microscale Features				

Tie-in	Description	REQUIREMENT			
ACP-130	Develop and certify knowledge of the fundamentals of a surface observation.	MAI Init	Date	Qual Board	MAI Init
ACP-130a	Sky condition.				
ACP-130b	Visibility.				
ACP-130c	Weather and obstructions to vision.				
ACP-130d	Pressure.				
ACP-130e	Temperature.				
ACP-130f	Wind.				
ACP-130g	Remarks/additive data.				
ACP-130h	Special Criteria.				
ACP-130i	Local Criteria				

T&R MANUAL, METOC

Tie-in	Description	REQUIREMENT			
ACP-131	Develop and certify proficiency at operating the Automated Surface Observing System (ASOS).	MAI Init	Date	Qual Board	MAI Init
ACP-131a	Power on system.				
ACP-131b	Log on as user				
ACP-131c	Manipulate software to display desired product.				
ACP-131d	Manipulate software to alter automated products when required.				
ACP-131e	Ensure archiving of data is achieved.				

Tie-in	Description	REQUIREMENT			
ACP-132	Develop and certify proficiency at operating garrison automated sensing equipment.	MAI Init	Date	Qual Board	MAI Init
ACP-132a	Determine and record type of observation.				
ACP-132b	Record time of observation.				
ACP-132c	Verify and record wind direction, speed, character, and significant wind events.				
ACP-132d	Evaluate, verify and record visibility.				
ACP-132e	Determine and record sky condition.				
ACP-132f	Read and record dry bulb and dew point temperatures.				
ACP-132g	Read and record current altimeter setting.				
ACP-132h	Encode and record applicable remarks.				
ACP-132i	Read and record station pressure.				
ACP-132j	Read and record sea level pressure.				
ACP-132k	Proof read recorded elements.				
ACP-132l	Initial observation, confirming accuracy of report.				
ACP-132m	Record summary of the day.				

Tie-in	Description	REQUIREMENT			
ACP-133	Develop and certify proficiency at utilizing manual sensing equipment.	MAI Init	Date	Qual Board	MAI Init
ACP-133a	Determine and record type of observation.				
ACP-133b	Record time of observation.				
ACP-133c	Determine and record wind direction, speed, character, and significant wind events.				
ACP-133d	Evaluate, verify and record visibility.				
ACP-133e	Determine and record sky condition.				
ACP-133f	Determine and record, dry bulb and wet bulb temperatures.				

T&R MANUAL, METOC

ACP-133g	Calculate dew point temperature.				
ACP-133h	Determine and record current altimeter setting.				
ACP-133i	Encode and record applicable remarks.				
ACP-133j	Determine and record station pressure.				
ACP-133k	Determine and record sea level pressure.				
ACP-133l	Proof read recorded elements.				
ACP-133m	Initial observation, confirming accuracy of report.				
ACP-133n	Determine and record summary of the day.				

Tie-in	Description	REQUIREMENT			
ACP-134	Introduce and demonstrate retention of computed values procedures.	MAI Init	Date	Qual Board	MAI Init
ACP-134a	Pressure altitude.				
ACP-134b	Density altitude.				
ACP-134c	Altimeter.				
ACP-134d	Wet Bulb Globe Temperature Index.				
ACP-134e	Wind Chill Temperature.				
ACP-134f	Fahrenheit to Celsius.				
ACP-134g	Relative Humidity.				
ACP-134h	Knots to Miles per hour.				
ACP-134i	Dew point.				

Tie-in	Description	REQUIREMENT			
ACP-135	Develop and certify proficiency at calculating Pressure Altitude	MAI Init	Date	Qual Board	MAI Init
ACP-135a	Certify proficiency at calculating Pressure Altitude				

Tie-in	Description	REQUIREMENT			
ACP-136	Develop and certify proficiency at calculating Density Altitude.	MAI Init	Date	Qual Board	MAI Init
ACP-136a	Certify proficiency at calculating Density Altitude.				

Tie-in	Description	REQUIREMENT			
ACP-137	Develop and certify proficiency at calculating Wet Bulb Globe Temperature Index (WBGTI).	MAI Init	Date	Qual Board	MAI Init
ACP-137a	Take Readings				
ACP-137b	Enter readings on locally prepared forms.				
ACP-137c	Apply standard calculations to readings.				
ACP-137d	Compare sum of corrected readings to index table.				

T&R MANUAL, METOC

Tie-in	Description	REQUIREMENT			
ACP-138	Develop and certify proficiency at utilizing Electronic Wet Bulb Globe Temperature Index sensing equipment	MAI Init	Date	Qual Board	MAI Init
ACP-138a	Power on system.				
ACP-138b	Select appropriate scales.				
ACP-138c	Ensure system is configured as per references.				
ACP-138d	Ensure sensing device is maintained per the references.				
ACP-138e	Conduct operator preventative maintenance.				

Tie-in	Description	REQUIREMENT			
ACP-139	Develop and certify proficiency at calculating Wind Chill Temperature.	MAI Init	Date	Qual Board	MAI Init
ACP-139a	Take Readings				
ACP-139b	Obtain wind speed.				
ACP-139c	Calculate wind chill temperatures.				

Tie-in	Description	REQUIREMENT			
ACP-140	Develop and certify proficiency at operating lightning detection equipment.	MAI Init	Date	Qual Board	MAI Init
ACP-140a	Power on system.				
ACP-140b	Log on to the system.				
ACP-140c	Establish communications.				
ACP-140d	Turn on/off directed alarm ranges.				
ACP-140e	Manipulate display support mission.				
ACP-140f	Configure and archive data.				

Tie-in	Description	REQUIREMENT			
ACP-141	Develop and certify knowledge of basic meteorological radar operations.	MAI Init	Date	Qual Board	MAI Init
ACP-141a	Perform power up/power down procedures.				
ACP-141b	Perform log on/log off functions.				
ACP-141c	Identify proper connectivity.				
ACP-141d	Disable alarms and identify threshold exceeded.				
ACP-141e	Retrieve and display radar products.				

Tie-in	Description	REQUIREMENT			
ACP-142	Develop and certify proficiency knowledge of Doppler radar products.	MAI Init	Date	Qual Board	MAI Init
ACP-142	Base Reflectivity.				
ACP-142	Base Velocity.				
ACP-142	Storm relative products.				
ACP-142	Echo tops				
ACP-142	Max tops				

T&R MANUAL, METOC

ACP-142	VAD				
ACP-142	VIL				
ACP-142	TVS				

Tie-in	Description	REQUIREMENT			
ACP-143	Develop and certify knowledge of the Upper Air Messages and the Skew T Log P.	MAI Init	Date	Qual Board	MAI Init
ACP-143a	Decode the upper atmospheric sounding in accordance with the references.				
ACP-143b	Identify the scales and use of scales located on the Skew T Log P diagram.				

Tie-in	Description	REQUIREMENT			
ACP-144	Develop and certify proficiency at plotting and analyzing a Skew-T Log-P diagram	MAI Init	Date	Qual Board	MAI Init
ACP-144a	Obtain Upper Air Observation Data.				
ACP-144b	Plot mandatory levels, significant levels, and significant wind data.				
ACP-144c	Analyze for CCL.				
ACP-144d	Analyze for LCL.				
ACP-144e	Analyze for LFC.				
ACP-144f	Analyze for PEA.				
ACP-144g	Analyze for NEA.				
ACP-144h	Analyze for SSI.				
ACP-144i	Analyze for T1.				
ACP-144j	Analyze for T2.				
ACP-144k	Analyze for Forecasted maximum temperature.				
ACP-144l	Analyze for Forecasted minimum temperature.				
ACP-144m	Analyze for Freezing level.				
ACP-144n	Analyze for Contrails.				
ACP-144o	Analyze for Tropopause.				

Tie-in	Description	REQUIREMENT			
ACP-145	Develop and certify proficiency at plotting warnings/advisories	MAI Init	Date	Qual Board	MAI Init
ACP-145a	Select the scale.				
ACP-145b	Plot the warning.				
ACP-145c	Check plots for accuracy				

Tie-in	Description	REQUIREMENT			
ACP-146	Develop and certify proficiency at plotting local area work charts (LAWC).	MAI Init	Date	Qual Board	MAI Init
ACP-146a	Certify proficiency at plotting local area work charts (LAWC).				

T&R MANUAL, METOC

Tie-in	Description	REQUIREMENT			
ACP-147	Develop and certify knowledge of knowledge of ceiling balloon operations.	MAI Init	Date	Qual Board	MAI Init
ACP-147a	Read and comprehends the procedures for determining ceiling heights utilizing ceiling balloons.				
ACP-147b	State the procedures for determining ceiling height utilizing ceiling balloons.				

Tie-in	Description	REQUIREMENT			
ACP-148	Develop and certify knowledge of Pilot Balloon (PIBAL) procedures and equipment	MAI Init	Date	Qual Board	MAI Init
ACP-148a	Theodolite.				
ACP-148b	Plotting board or appropriate software				
ACP-148c	Appropriate balloon based on sky condition.				
ACP-148d	Required weight sets				
ACP-148e	Appropriate conversion tables				

Tie-in	Description	REQUIREMENT			
ACP-149	Develop and certify proficiency at PIBAL observations	MAI Init	Date	Qual Board	MAI Init
ACP-149a	Determine size and color of balloon.				
ACP-149b	Assemble, level and orient the theodolite.				
ACP-149c	Launch balloon.				
ACP-149d	Annotate entries every 60 seconds on form.				
ACP-149e	Using current software enter elevation and azimuth entries. (Manual devices may be substituted if available).				
ACP-149f	Retrieve, encode and disseminate.				

Tie-in	Description	REQUIREMENT			
ACP-150	Develop and certify proficiency Pilot Reports (PIREPs) procedures.	MAI Init	Date	Qual Board	MAI Init
ACP-150a	Receive PIREP via available comm.				
ACP-150b	Annotate the TEI's on the correct form				
ACP-150c	Disseminate the PIREP				

Tie-in	Description	REQUIREMENT			
ACP-151	Develop and certify knowledge of routine METOC reports.	MAI Init	Date	Qual Board	MAI Init
ACP-151a	Earthquake Report.				
ACP-151b	Tsunami Report.				
ACP-151c	Station Information Report				
ACP-151d	Pilot Report.				
ACP-151e	Volcano Report.				

T&R MANUAL, METOC

Tie-in	Description	REQUIREMENT			
ACP-152	Develop and certify proficiency at calculating astronomical data.	MAI Init	Date	Qual Board	MAI Init
ACP-152a	Calculate solar and lunar data for 5 specified locations.				

Tie-in	Description	REQUIREMENT			
ACP-153	Develop and certify proficiency at calculating tidal data.	MAI Init	Date	Qual Board	MAI Init
ACP-153a	Calculate tidal data for 5 specified locations.				

Tie-in	Description	REQUIREMENT			
AMO-155	Conduct weather watches	MAI Init	Date	Qual Board	MAI Init
AMO-155a	Ensure all duties are fully completed.				
AMO-155b	Conduct security procedures.				
AMO-155c	Mentor subordinates on watch functions.				
AMO-155d	Identify logistic requirements.				
AMO-155e	Conduct quality assurance procedures.				
AMO-155f	Monitor data ingest of METOC information.				
AMO-155g	Identify observational special criteria relevant to locally produced forecast products and locally produced warnings.				
AMO-155h	Identify and correct METOC analyst apprentice training deficiencies.				
AMO-155i	Ensure the timely and accurate dissemination of locally produced METOC data and products.				
AMO-155j	Ensure the timely and accurate dissemination of locally produced warnings/advisories.				