



PT. SMART CAKRAWALA AVIATION

WORK ORDER

Form: SCA/MTC/030

Subject : Inspection Document 20 (ELT Functional Check) due at August 2022	No.	WO/084-SNK/VIII/2022
	Date	12 Aug 2022
	A/C Reg.	PK-SNK C208-00658
Reference : MP C208B Rev. 12	Prepared By	TS
	Checked By	CI
	Approved By	TM
To : Engineer In Charge		
Description : <ol style="list-style-type: none">1. Perform Inspection Document 20 (ELT Functional Check) due at August 20222. Make an entry in Maintenance Log.3. Return the Completed Work Order and Form to PPC. <p>#If any finding, please close the routine card, and transferred to inspection card.</p>		
Additional Work : NIL		
Compliance Statement Carried out	Sign & Date Company Lic. No.: 8A27 19/08 2022 (Engineer In Charge)	Signature (Technical Manager)

AIRCRAFT CHECK WORK SUMMARY
(Form: SCA/MTC/051)

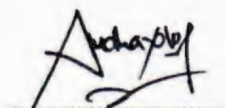
DATE OF ISSUED	JO/WO #	TYPE OF MAINTENANCE	DATE OF ACCOMPLISHED	
12 Aug 2022	WO/084-SNK/VIII/2022	Inspection Doc. 20	19 August 2022	
A/C Type		Mfg. Serial Number	A/C Registration	
C208		C208-00658	PK-SNK	
AIRCRAFT DATA				
Subject	Pos #	Serial Number (SN)	TTSN/TCSN	
Engine	#1	PCE-PC1988	6571 : 10 / 10.050	
	#2	-		
Propeller/Rotor	#1	190345	3733 : 45	
	#2	-		
Landing Gear	NLG		3733 : 45	
	LH MLG			
	RH MLG			
PACKAGE COVERED				
No	Subject	Qty	Remark	
1	Non-Routine Card	-		
2	Inspection Card	1	✓	
3	Work Order	1	✓	
4	Summary Inspection List	1	✓	
5	Material and Tool List	-		
6	Escalation form	-		
7	CRS (SMI / Unscheduled Maintenance)	1	✓	
INSPECTION CARD (IC) LIST (Finding during maintenance)				
No	Taskcard Ref	Subject	Status	Name/ Sign & Stamp
			Open Close	
<u>IC-001</u>				
<u>IC-002</u>				
<u>IC-003</u>				

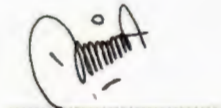
Prepared by :
Technical Support

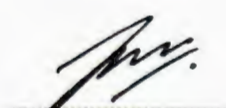
Checked by :
Chief Maintenance

Verified by :
Chief Inspector

Approved by :
Technical Manager


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Hani


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Dodit


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Yanuar


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Istiono



SUMMARY INSPECTION ITEMS
(Form: SCA/MTC/050)

WO Ref: WO/084-SNK/VIII/2022

NO.	TASK CARD NO.	DESCRIPTION	DATE	EST MHR	NAME	STAMP
1	CHAPTER 26	INSPECTION DOCUMENT 20 (ELT FUNCTIONAL CHECK)	19/2022 08		Wahjono	



PT. SMART CAKRAWALA AVIATION

CERTIFICATE RETURN TO SERVICE
SCHEDULED MAINTENANCE INSPECTION
(CRS-SMI)

A/C TYPE : CESSNA 208

TTSN : 3733:45

A/C REG : PK-SNK

TCSN : 5398

MSN : C208-00658

DATE : 19 Aug 2022

TYPE OF INSPECTION : INSPECTION DOC. 20 (ELT FUNCTIONAL CHECK)

DUE AT : AUG 2022

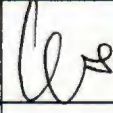

REFF : MP C208/ C208B Rev. 12

EXCEPTION

NO EXCEPTION

AUTHORIZED PERSON

I hereby certify that this aircraft has been maintained accordance with CASR and Maintenance Program.
Aircraft safe and airworthy for flight

NAME	CAT	AMEL/OTR NO	SIGN&STAMP	DATE
WAHYONO	AIRFRAME & POWER PLANT	5792/SCA27	 	19 / 2022
	EIRA			08

THE NEXT DUE TYPE OF INSPECTION : Inspection Doc 20 (ELT functional check)

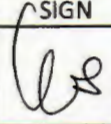

DUE AT : Aug 2024


Form: SCA/MTC/049



MAINTENANCE PROGRAM CESSNA C208/C208B

Chapter 26 – Inspection Document 20

Reg. Mark	: PK - SNK	Date	: 19-08-2022
MSN	: 00658	Station	: Pondok Cabe
TSN / CSN	: 3733:45/5398	WO No.	: WO/084-SNK/VIII/2022

ITEM CODE NO.	ZONE	TASK	SIGNATURE	
			SIGN	STAMP
B256005	220 311 312 340	ARTEX C406-N Emergency Locator Transmitter (ELT) Functional Check Task 25-60-00-722		
*** End of Inspection Document 20 Items ***				

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER
Wahyono	Engineer		5792

RETURN TO SERVICE			
The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.			
Name	: WAHYONO	Stamp	: 
Signature	: 	Place/Date	: Pondok Cabe 19/08/22

NOTE: This will take one second. The ELT remote switch will start to flash.

- (13) Set the ELT remote switch back to the ARM position and monitor the LED.

NOTE: The ELT will do a self-test. The LED will stay on for one second and the ELT sweeps are not audible on the airplane speakers if the ELT operation is normal.

NOTE: The ELT does not transmit a 406.028 MHz test signal to the SARSAT tester until the ELT remote switch is set back to the ARM position.

- (14) If the LED continues to flash, refer to [Artex ME406 Emergency Locator Transmitter System - Troubleshooting](#).
- (15) If the SARSAT tester did not receive a 406.028 MHz signal and the ELT remote switch LED does not show a transmitter problem, do the test again.
- (16) When the SARSAT tester receives a 406.028 MHz signal, scroll the pages on the tester, as necessary, and make sure of the information that follows:
- (a) Make sure the information shown by the SARSAT tester agrees with the placard on the ELT.

NOTE: The information that follows must match the data on the ELT placard:

- COUNTRY code
- 15-digit Hex code ID
- Aircraft identification number.

- (b) Make sure that the SARSAT tester shows the messages that follow:

- S' TEST OK
- Frequency - PASS
- Homing frequency
- Message format (short).

NOTE: When ownership of an aircraft is transferred within the same country, the ME406 ELT should be registered with the applicable authority. When an aircraft with a ME406 ELT changes tail number or country registration, the ELT will need to have the new identification data entered. The ELT will also need to be registered with the applicable authority.

G. Restore Access

- (1) Close access panel [340A](#). Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.

END OF TASK

TASK 25-60-00-722

4. ARTEX C406-N Emergency Locator Transmitter (ELT) Functional Check

A. General

- (1) This task gives the procedures to do a functional check of the Artex C406-N Emergency Locator Transmitter (ELT).

B. Special Tools

- (1) 50 Ohm Dummy Load
- (2) Amplitude Modulation (AM) Receiver
- (3) Attenuator (30 dB)
- (4) SARSAT Tester

C. Access

- (1) Open access panel [340A](#) on the right side of the vertical stabilizer. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.

D. Do an inspection of the ELT, mounting tray, antenna, and the ELT battery for condition and correct installation.

- (1) Make sure that the ELT switch, found on the forward end of the ELT, is set to the OFF position.
- (2) Remove the ELT from the mounting tray. Refer to [ARTEX C406-N Emergency Locator Transmitter System - Maintenance Practices](#).

CAUTION: Do not use solvents to clean the ELT, mounting tray, or electrical contacts. Solvents used in these areas can cause damage to the ELT housing.

- (3) Examine the ELT and the mounting tray for correct installation, cleanliness, cracks, or other damage.

- (4) Examine the ELT battery for corrosion.
- (5) Look at the battery expiration date.
 - (a) Make sure that the battery life limit is not expired.
 - (b) Make sure that the battery expiration date is shown correctly in the maintenance records.

NOTE: The battery manufacturer puts a mark on the battery to show the battery life limit. When you install a new battery in an ELT, make sure that you make a record of the expiration date in the space given on the ELT name and data plate.

- (c) If you have to replace the ELT battery, refer to ARTEX Maintenance Manual 570-5060.
- (d) You must replace the ELT battery with a new battery if one or more of the conditions that follow occur:
 - Use of the ELT battery in an emergency
 - Operation for an unknown amount of time
 - Use for more than one hour of cumulative time
 - Replace the battery if the voltage under load is less than 12.0 vdc.
 - Replacement date shown on the battery label has expired or will expire before the next scheduled inspection.
- (e) Record the new battery expiration date in the maintenance log if you replaced it.

- (6) Examine the ELT antenna for correct installation and cracks or other damage.

E. Do a G-Switch Operational Test.

NOTE: If possible, do the test procedure for the emergency locator transmitter inside a metal hangar with the doors closed to decrease the signal transmission from the ELT unit during the test.

CAUTION: Operate the Emergency Locator Transmitter (ELT) system only during the first five minutes of each hour. If you must complete the functional test at a time other than the first five minutes of the hour, you must do the test with a direct connection to the ELT and a 30 dB attenuator. Refer to the FAA Advisory Circular 91-44A.

CAUTION: Do not operate the Emergency Locator Transmitter (ELT) for more than five seconds at a time. Do not operate the ELT again for 15 seconds. The ELT will transmit a 406.028 MHz signal for 520 milliseconds approximately every 50 seconds. This transmission is an encoded digital message and is sent to a satellite as a distress signal.

- (1) Install a jumper wire between pins 12 and 13 on the electrical connector of the ELT.

CAUTION: Do this procedure with an experienced technician because of the potential physical damage that can occur if the jumper wire is not installed correctly.

NOTE: The ELT will not activate with the G-switch unless electrical pins 12 and 13 have a jumper wire installed between them (this happens automatically when the ELT is locked into the mount tray with the electrical connector in position).

- (2) Make sure the ELT switch is in the OFF position.
- (3) Use a amplitude modulation (AM) receiver and set it to 121.5 MHz to listen for the aural warning sweep tone.
- (4) Hold the ELT transmitter tightly in one hand and make a throwing movement, then an opposite movement of the ELT transmitter.
- (5) Make sure that the G-switch operates and that the aural warning sweep tone is heard on the AM receiver set to 121.5 MHz.
- (6) Set the ELT switch to the ON position and then back to the OFF position to reset the G-switch.
- (7) Remove the jumper wire from electrical pins 12 and 13 on the electrical connector of the ELT.
- (8) Install the emergency locator transmitter in the airplane. Refer to [ARTEX C406-N Emergency Locator Transmitter System - Maintenance Practices](#).

F. Transmitter Test of the ARTEX C406-N Emergency Locator Transmitter (ELT) System.

CAUTION: Operate the Emergency Locator Transmitter (ELT) system only during the first five minutes of each hour. If you must complete the functional test at a time other than the first five minutes of the hour, you must do the test with a direct connection to the ELT and a 30 dB attenuator. Refer to the FAA Advisory Circular 91-44A.

CAUTION: Do not operate the Emergency Locator Transmitter (ELT) for more than five seconds at a time. Do not operate the ELT again for 15 seconds. The ELT will transmit a 406.028 MHz signal for 520 milliseconds approximately every 50 seconds. This transmission is an encoded digital message and is sent to a satellite as a distress signal.

- (1) Make sure that the BATTERY switch and the AVIONICS switches are in the OFF position.
- (2) Connect external electrical power to the airplane.
- (3) Make sure that the COM/NAV 1 and AUD/MKR circuit breakers on the circuit breaker panel are engaged.
- (4) Set the BATTERY switch to the ON position.
- (5) Set the AVIONICS switches to the ON position.
- (6) Make sure that the ELT remote switch on the right panel is in the ARM position.
- (7) Set one of the communication units to receive a frequency of 121.5 MHz.
- (8) Set the communication unit to the airplane speakers at an audio level that will be heard.

NOTE: The SARSAT (Search And Rescue Satellite Aided Tracking) tester is used as an example to gather test information. Refer to Artex website for more information on testing equipment. Generally, the testing is completed with the Artex Handheld Programmer 453-1000 for all 406 Mhz ELTs. However, other equivalent test equipment such as the Aeroflex IFR 4000 Communications Test Set is acceptable.

- (9) Another person must use the SARSAT tester set to the RECV function. Refer to [Figure 602](#).

NOTE: The SARSAT tester must be less than 15 feet from the ELT antenna and must have a line-of-sight between the ELT antenna and SARSAT tester.

NOTE: The person with the SARSAT tester must make sure that the ELT buzzer is heard during the test.

NOTE: If it is necessary to do the transmitter test after the first five minutes of the hour, connect the SARSAT tester directly to the ELT with a coaxial cable and a 30 dB attenuator. You will not hear the sweep tone from the ELT on the airplane speakers with the attenuator installed.

- (10) Install the 30 dB attenuator between the ELT and SARSAT tester if necessary.
- (11) Set the ELT remote switch on the right panel to the ON position.
- (12) Let the ELT make three sweeps on the airplane speakers.

NOTE: This will take one second. The ELT remote switch will start to flash.

- (13) Set the ELT remote switch back to the ARM position and monitor the LED.

NOTE: The ELT will do a self-test. The LED will stay on for one second and the ELT sweeps are not audible on the airplane speakers if the ELT operation is normal.

NOTE: The ELT does not transmit a 406.028 MHz test signal to the SARSAT tester until the ELT remote switch is set back to the OFF position.

- (14) If the LED continues to flash, refer to [ARTEX C406-N Emergency Locator Transmitter System - Troubleshooting](#).
- (15) If the SARSAT tester did not receive a 406.028 MHz signal and the ELT remote switch LED does not show a transmitter problem, do the test again.
- (16) When the SARSAT tester receives a 406.028 MHz signal, scroll the pages on the tester, as necessary, and make sure of the following:

- (a) Make sure that the information shown by the SARSAT tester agrees with the placard on the ELT.

NOTE: The information that follows must match the data on the ELT placard:

- COUNTRY code
- 15-digit Hex code ID
- Aircraft identification number.

- (b) Make sure that the SARSAT tester shows the messages that follow:

- S' TEST OK
- Frequency - PASS
- Homing frequency

- Message format (short).

NOTE: When ownership of an aircraft is transferred within the same country, the C406-N ELT must be registered with the applicable authority. When an aircraft with a C406-N ELT changes tail number or country registration, the ELT must have the new identification data entered. The ELT must be registered with the applicable authority.

G. Restore Access

- (1) Close access panel 340A. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.

END OF TASK

TASK 25-60-00-723

5. Dome and Margolin, Pointer 3000-1, and Pointer 3000-11 Emergency Locator Transmitter (ELT) Functional Check

A. General

- (1) This task gives the procedures to do a functional check of the Dome and Margolin, Pointer 3000-1, and Pointer 3000-11 Emergency Locator Transmitter (ELT).

B. Special Tools

- (1) Amplitude Modulation (AM) Receiver

C. Access

- (1) Remove the aft cabin partition or unzip the canvas wall to get access to the ELT. Refer to [Rear Cargo Compartment Wall - Maintenance Practices](#).

D. Do an inspection of the ELT, mounting tray, antenna, and the ELT battery for condition and correct installation.

- (1) Make sure that the ELT master switch, found on the forward end of the ELT, is set to the OFF position.
- (2) Remove the ELT from the mounting tray. Refer to [Emergency Locator Transmitter System - Maintenance Practices](#).

CAUTION: Do not use solvents to clean the ELT, mounting tray, or electrical contacts. Solvents used in these areas can cause damage to the ELT housing.

- (3) Examine the ELT and the mounting tray for correct installation, cleanliness, cracks, or other damage.

- (4) Examine the ELT battery for corrosion.

- (5) Look at the battery expiration date.

- (a) Make sure that the battery life limit is not expired.

- (b) Make sure that the battery expiration date is shown correctly in the maintenance records.

NOTE: The battery manufacturer puts a mark on the battery to show the battery life limit. When you install a new battery in an ELT, make sure that you make a record of the expiration date in the space given on the ELT switch nameplate on the side of unit, and on the instruction nameplate on the top of unit.

- (c) If it is necessary to replace the ELT battery, refer to [Emergency Locator Transmitter System - Maintenance Practices](#).

- (d) You must replace the ELT battery with a new battery if one or more of the conditions that follow occur:

- The ELT battery is used in an emergency
- Operation for an unknown amount of time
- The ELT battery is used for more than one hour of cumulative time
- The voltage under load is less than 12.0 Vdc
- The replacement date shown on the battery label has expired or will expire before the next scheduled inspection.

- (e) Record the new battery expiration date in the maintenance log if you replaced it.

- (6) Examine the ELT antenna for correct installation, cracks, or other damage.

E. Do a G Switch Operational Check (Dome and Margolin/Pointer 3000-1 Series).

- (1) While you hold the transmitter in one hand, sharply strike the end of the case in the direction of activation shown on the transmitter case.

- (a) Make sure that the G switch has been actuated.

(2) Reset the G switch.

F. Do a G Switch Operation Check (Pointer 3000-11 Series).

- (1) Hold transmitter firmly in one hand and make a throwing motion followed by a sudden reversal of the transmitter.
 - (a) Make sure that the G switch has been actuated.
- (2) Reset the G switch.

G. Do an Operational Check of the Radiated Signal with Local Monitoring.

- (1) Install the ELT in the airplane. Refer to [Emergency Locator Transmitter System - Maintenance Practices](#).
- (2) Make sure that test is performed within five minutes before or after the hour.
- (3) Put a small, hand held AM radio tuned to any frequency, within six inches of the emergency locator transmitter antenna.

NOTE: Use of the airplanes VLF receiver or the ADF will not do a sufficient power check of the radiated signal.

- (4) For Pointer 3000-1 ELT's, disconnect the remote connector from the ELT.

CAUTION: For Pointer 3000-1 ELT's, the remote connector must be disconnected from the ELT before you do maintenance. If the remote connector is not disconnected, it could cause the ELT's internal fuse to blow.

- (5) Put the master switch to the ON position to activate the emergency locator transmitter system.

NOTE: On Pointer 3000-11 series system, the transmitter can be activated from the cockpit by placing the remote mounted switch to ON position. Other transmitters must be activated from the tailcone mounting area.

- (6) Activate the emergency locator transmitter system for no more than three sweeps of the audio signal.
 - (a) Make sure that the signal has been detected on the AM radio.
 - (b) If the ELT does not operate correctly during the functional check, remove the transmitter and return it to an authorized avionics repair shop for inspection and repair. Refer to [Emergency Locator Transmitter System - Maintenance Practices](#).

- (7) Restore the master switch to the AUTO position.

NOTE: On Pointer 3000-11 series system, momentarily place the remote mounted switch to the RESET position then release it. This will put the transmitter in the AUTO position.

- (8) For Pointer 3000-1 ELT's, connect the remote connector to the ELT.
- (9) Make an entry in the Airplane Logbook to show that the test has been completed.

H. Restore Access

- (1) Install aft cabin partition or zip the canvas wall. Refer to [Rear Cargo Compartment Wall - Maintenance Practices](#)

END OF TASK

TASK 25-60-00-960

6. Emergency Locator Transmitter Battery Discard

A. General

- (1) This section gives the information needed to complete the discard procedures for the emergency locator transmitter battery.

B. Tools and Equipment

- (1) None

C. Access

- (1) For Artex series ELT's, open access panel 340A on the right side of the vertical stabilizer to get access to the transmitter. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
- (2) For Dorne and Margolin, Pointer 3000-1, and Pointer 3000-11 series ELT's, remove the aft cabin partition or unzip the canvas wall to get access to the transmitter. Refer to [Rear Cargo Compartment Wall - Maintenance Practices](#).

D. Discard of the Emergency Locator Transmitter Battery.

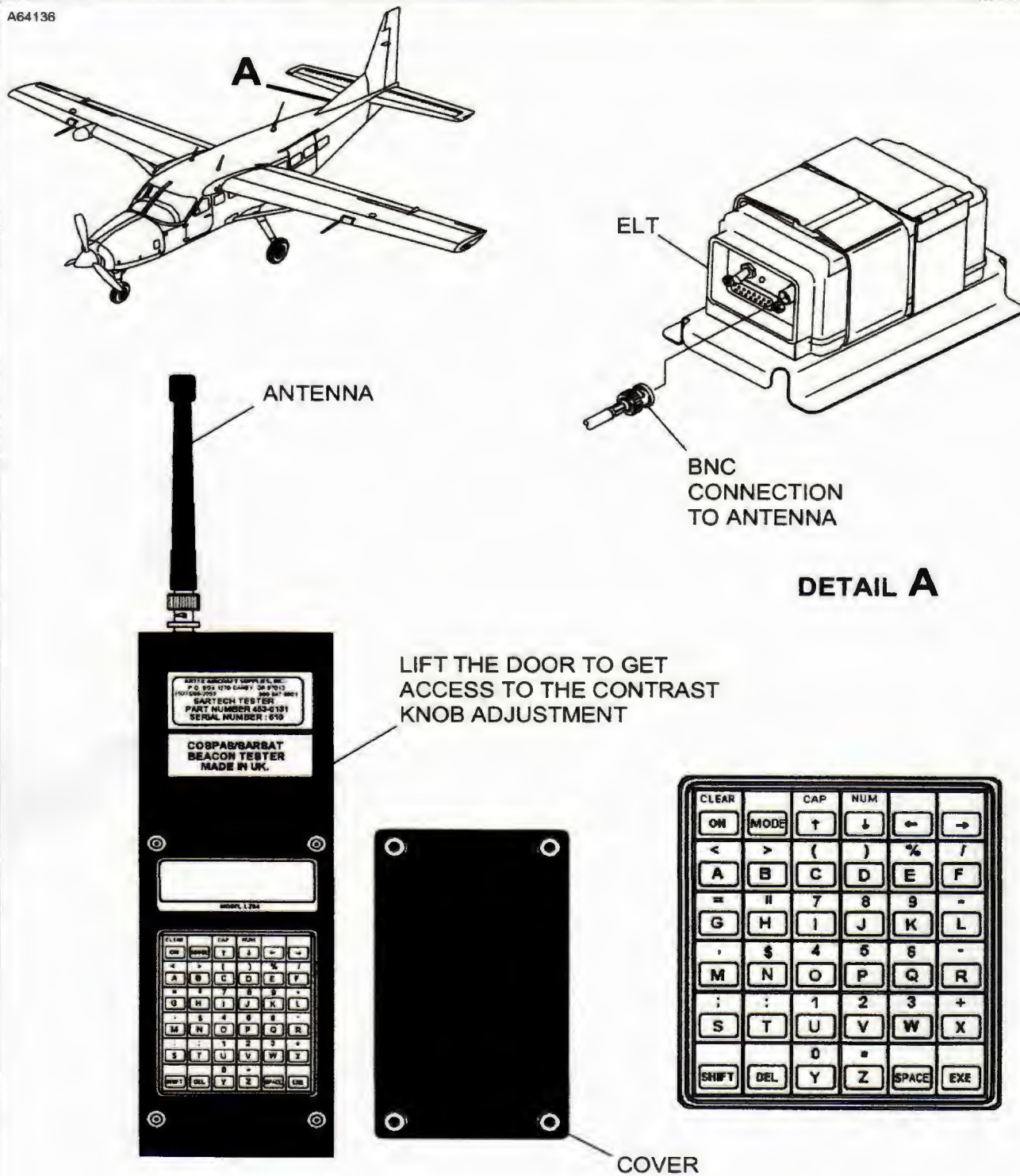
- (1) Remove emergency locator transmitter (ELT) from the airplane.

- (a) For the Artex C406-2 ELT, refer to [ARTEX C406-2 Emergency Locator Transmitter System - Maintenance Practices](#).
 - (b) For the Artex ME406 ELT, refer to [Artex ME406 Emergency Locator Transmitter System - Maintenance Practices](#).
 - (c) For the Artex C406-N ELT, refer to [ARTEX C406-N Emergency Locator Transmitter System - Maintenance Practices](#).
 - (d) For Dorne and Margolin, Pointer 3000-1, and Pointer 3000-11 series ELT's, refer to [Emergency Locator Transmitter System - Maintenance Practices](#).
- (2) Remove the battery pack from the ELT.
- (a) For Artex series ELT's, refer to the applicable Artex 406MHz Emergency Locator Transmitters Description, Operation, Installation and Maintenance Manual. Refer to the Introduction, [List of Publications](#).
 - (b) For Dorne and Margolin, Pointer 3000-1, and Pointer 3000-11 series ELT's refer to [Emergency Locator Transmitter System - Maintenance Practices](#).
- (3) Install a new battery pack in the ELT.
- (a) For Artex series ELT's, refer to the applicable Artex 406MHz Emergency Locator Transmitters Description, Operation, Installation and Maintenance Manual. Refer to the Introduction, [List of Publications](#).
 - (b) For Dorne and Margolin, Pointer 3000-1, and Pointer 3000-11 series refer to [Emergency Locator Transmitter System - Maintenance Practices](#).
- (4) Install the emergency locator transmitter in the airplane.
- (a) For the Artex C406-2 ELT, refer to [ARTEX C406-2 Emergency Locator Transmitter System - Maintenance Practices](#).
 - (b) For the Artex ME406 ELT, refer to [Artex ME406 Emergency Locator Transmitter System - Maintenance Practices](#).
 - (c) For the Artex C406-N ELT, refer to [ARTEX C406-N Emergency Locator Transmitter System - Maintenance Practices](#).
 - (d) For Dorne and Margolin, Pointer 3000-1, and Pointer 3000-11 series ELT's, refer to [Emergency Locator Transmitter System - Maintenance Practices](#).
- (5) Make an entry in the Airplane Logbook to show the battery pack replacement date and the next expiration date. The new battery expiration date can be put on a label on the face of the transmitter.
- E. Restore Access
- (1) For Artex series ELT's, close access panel [340A](#). Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
 - (2) For Dorne and Margolin, Pointer 3000-1, and Pointer 3000-11 series ELT's, install the aft cabin partition or zip the canvas wall. Refer to [Rear Cargo Compartment Wall - Maintenance Practices](#).

END OF TASK

Figure 601 : Sheet 1 : Artex ME406 Emergency Locator Transmitter (ELT) SARSAT Test Set-up

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A2618T1386
6618T1379

Figure 601 : Sheet 2 : Artex ME406 Emergency Locator Transmitter (ELT) SARSAT Test Set-up

A64137

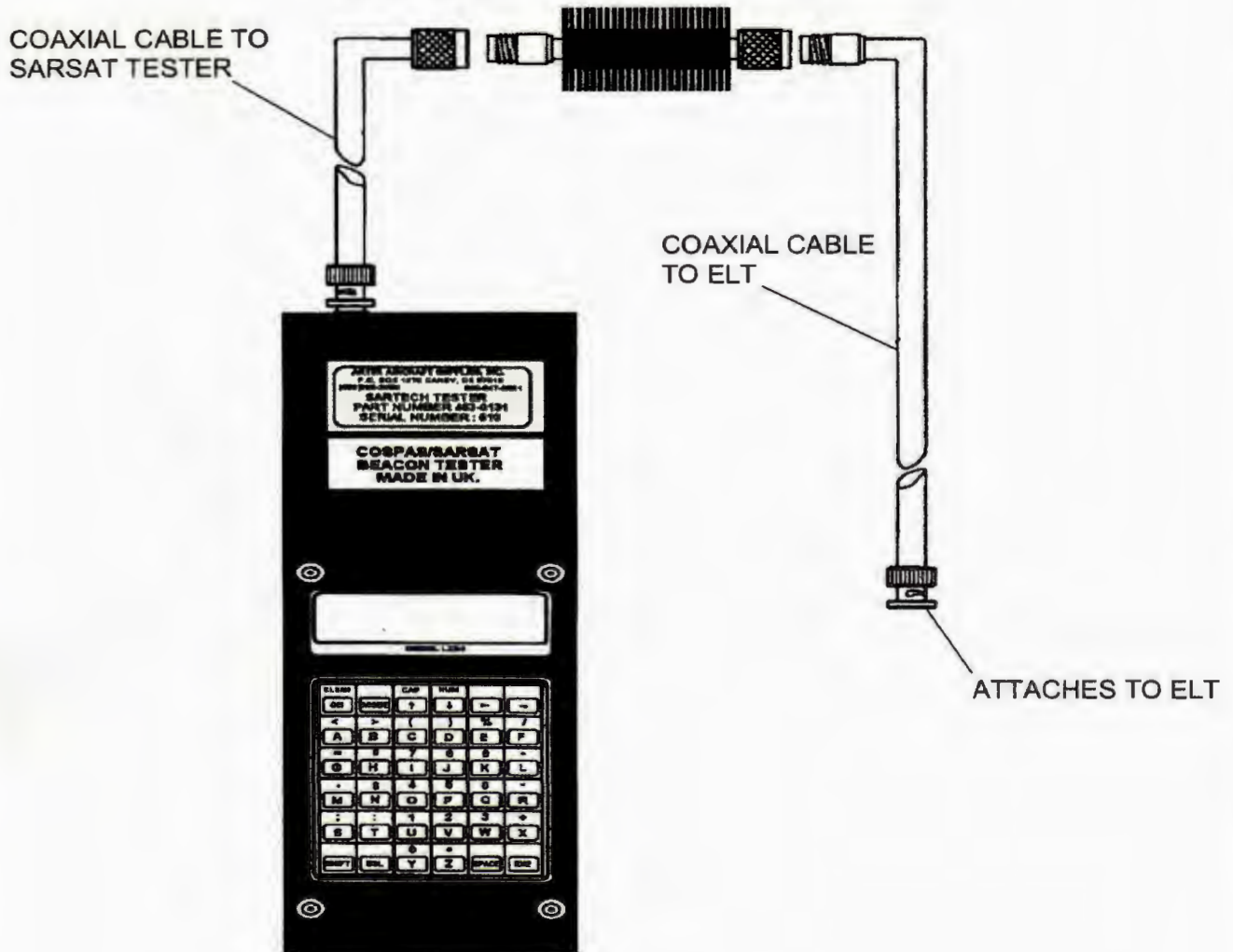
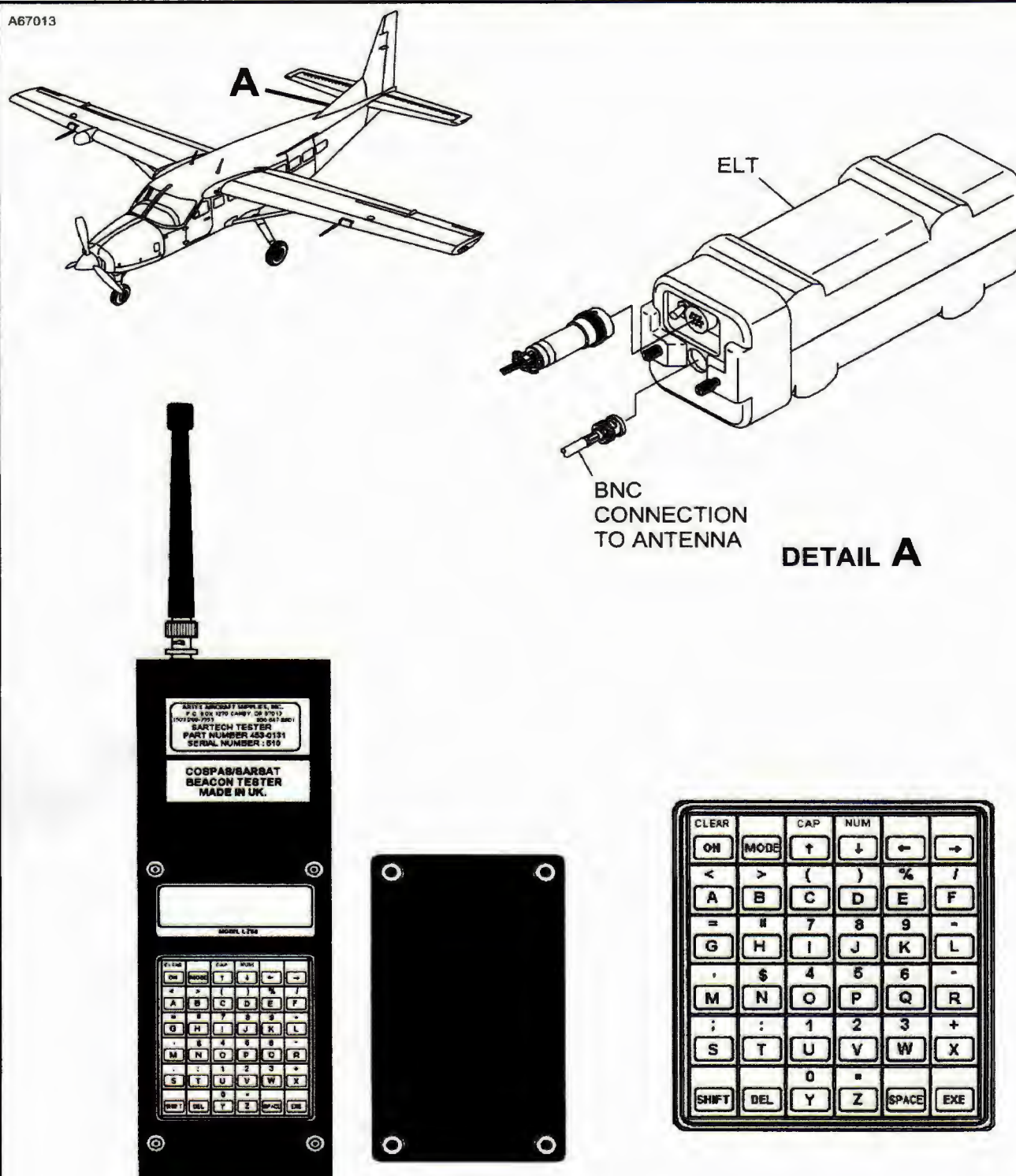


Figure 602 : Sheet 1 : ARTEX C406-N Emergency Locator Transmitter (ELT) SARSAT Test Set-up

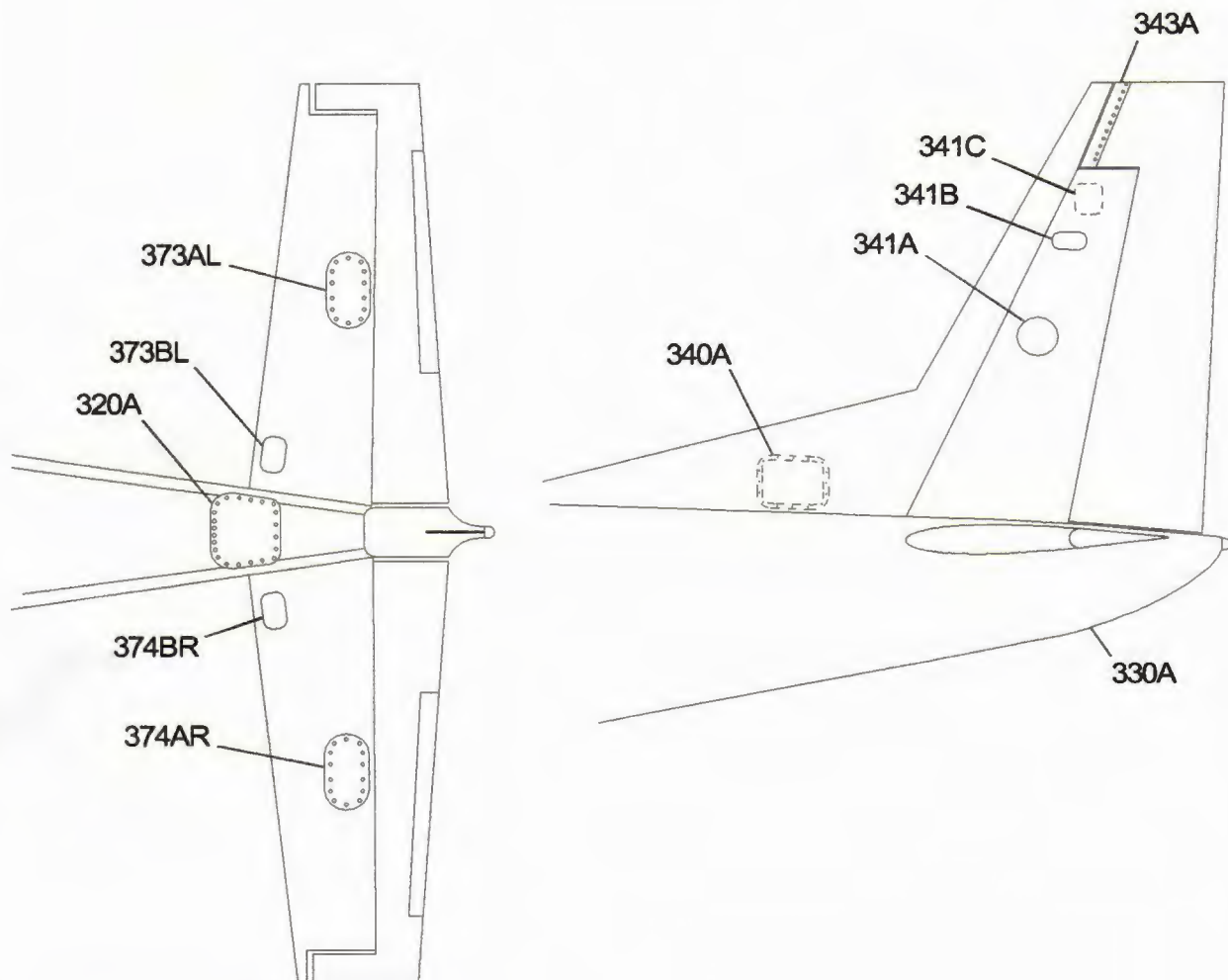
A67013



2610T7005
A5618T1589
6618T1379

Figure 9 : Sheet 1 : Aft Fuselage, Horizontal and Vertical Stabilizer Panels

A22967



VIEW LOOKING UP AT TAILCONE

2610T1009

[illegible]



Additional Work Sheet
Inspection Doc. 20

Aircraft Registration: **PK-SNK**

WO# Nr: WO/084-SNK/VIII/2022

Parts Used Sheet

2

Part Used

[illegible]

elt - 2022-08-19 16:57:08

=====
Result
=====

Full Message

E0D32 5BF31 A4DF0 92A73 4FE0F F0F61

Hex ID

C1A64 B7E63 49BE1

Message Format

Long

Protocol Flag

User

Country Code

525 - Indonesia

Aircraft Address

PK-SNK

ELT Number

1st ELT

Radio-Locating

121.5 MHz

Position Data Source

External

Latitude Encoded

127° 0' 0" (Default)

Longitude Encoded

255° 0' 0" (Default)

Power

-38.38 dBm

Frequency

406.0276 MHz