PROJECT 10073 RECORD

1. DATE - TIME GROUP	2. LOCATION
Oct 65 - 27 June 66	Andersen AFB, Guam
3. SOURCE Military	**10. CONCLUSION** Other (FALSE TARGETS)
4. NUMBER OF OBJECTS Varied	
5. LENGTH OF OBSERVATION Varied	**11. BRIEF SUMMARY AND ANALYSIS** Radar beacon returns with no known or identifiable source have been noted since October 1965. RADAR ANALYSIS: It is obvious that material (solid) targets are not involved.
6. TYPE OF OBSERVATION Ground-Radar	
7. COURSE Varied	
8. PHOTOS ☐ Yes XXNo	
9. PHYSICAL EVIDENCE ☐ Yes XXNo	

FORM
FTD SEP 63 0-329 (TDE) Previous editions of this form may be used.

[redacted]

UNCLASSIFIED

TDETR /Maj Quintanilla/70916/mhs/15 Aug 66

FAA Radar Phenomenon (U)

AUG 19 1966

3rd Air Division

(U) Reference your message, CONF/NCFORN/DI CC827, subject: FAA Radar Phenomenon. Radar analysis has been completed and is attached for your information.

FOR THE COMMANDER

W. S. Wheeler

WARREN S. WHEELER, Colonel, USAF
Deputy for Technology and Subsystems

1 Atch
Ltr, fm FTD (TDETR), 10 Aug 66, subj: (U) FAA Radar Phenomenon, (C), 2 pgs, 1 cy.

COORDINATION

TDETR MAJ M QUINTANILLA, JR DATED 15 Aug 66

TDET DATED 15 Aug 66

TDETR OFFICIAL FILE CY

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

Classification Cancelled
For [redacted]
Auth. [redacted]
By Quintanilla
Date 15 May 68
AFSC 205-1 June 67 (5)

If inclosure [redacted] is withdrawn (or not attached), this classification on correspondence will be downgraded to UNCLASSIFIED in accordance with AFR 205-1.

UNCLASSIFIED

[redacted]

[redacted]

UNCLASSIFIED

TDEER/Mr. Bryant/pkj/70401

FAA Radar Phenomenon (U)

10 Aug 66

TDETR (Maj Quintanilla)

1. (U) The information included in FAA message CONF/NO FORN/DI 00827 Jul 66 has been evaluated, and the following comments are submitted:

a. (U) The data as submitted does not lend itself to analysis of individual tracks as such. This is not necessarily a drawback, since individual track data would probably not be of significant help in analyzing the situation.

b. (C) Considering the overall situation as such, several facts appear obvious on the face of the report. First, since interceptors have flown over and/or through the targets without any visual sighting or other evidence of the presence of material objects, it can be concluded that if material objects are causing the returns (as contrasted with returns from weather fronts, temperature variations in the atmosphere, etc), then the material objects are at some other location than that indicated by the radar. Second, the fact that coded IFF returns are received eliminates many of the usual causes for false returns, and almost certainly indicate the target is IFF equipped. (Under some conditions, it is conceivable that maintenance shops testing equipment, or some activity engaged in spoofing could emit such signals, but these are not considered likely.)

c. (C) If a. and b. are correct, one explanation for this type of return would be multiple range return; i.e., second-, third-, or fourth-time-around returns. This is feasible because the transmission is one-way transmission, rather than two-way as is normal for radar returns. This would also explain the sometime presence of skin painting of the target - an aircraft broadside could have a radar cross section of hundreds of square meters, which would be detectable for several times the normal airborne radar range. Flickering or disappearing skin paints would be caused by the aircraft changing aspect and having an insufficient cross section area to provide a radar paint. The IFF would still be triggered, however, and the coded return would remain.

Classification Cancelled
[redacted]

DOWNGRADED AT 12 YEAR INTERVALS; NOT AUTOMATICALLY DECLASSIFIED. DOD DIR 5200.10

UNCLASSIFIED

[redacted]

[redacted]

d. (C) Simultaneous loss of the target by several radars and some of the target speeds not usually associated with aircraft could be due to ducting, and changes in either the atmosphere which would change the ducting, or due to the aircraft responsible for the returns flying out of the duct. Extraordinarily high or low speeds and hovering targets can sometimes be attributed to the geometry of the reflecting or refracting pattern.

e. (C) The presence of the Soviet trawler is not believed to play a part in this situation. If the signals were originating in the trawler, it would be easy to DF on the source, which would then make the answer obvious. Triggering the airborne IFF's from the trawler would not provide returns that would synchronize with other radars observing the returns, and the patterns would not be logical and probably not be recognizable.

2. (U) This evaluation does not attempt to answer, item for item, the statement of events in the incoming message. Since it is obvious that material (solid) targets are not involved, we have tried to reason out how the conditions could happen.

JEROME J. JONES, Colonel, USAF
Electronics Directorate
Deputy for Technologies and Subsystems

[redacted]

[redacted]

UNCLASSIFIED

TDETR/Maj. H. Quintanilla, Jr./70916 mhs

FAA Radar Phenomenon (UFO) JUL 2 7 1966

TDEER/Mr. Bryant

Reference the attached message, CONF/NOFORN/DI 00827 Jul 66, from 3rd Air Division, Andersen AFB, Guam, subject as above. Request your comprehensive analysis as to the probable cause of the radar returns as soon as possible.

for LOUIS DE GOES, Colonel, USAF
Chief Aerospace Technologies Directorate
Deputy for Technology and Subsystems

1 Atch
Msg, CONF/NOFORN/DI 00827 Jul 66, fm 3ADIV Andersen AFB, Guam, 6 pgs, 1 cy

COORDINATION:

H. Quintanilla DATE 25 Jul 66
TDETR MAJ H. QUINTANILLA, JR

Classification Cancelled
[redacted]
Auth: [redacted]
By: Quintanilla
Date: 30 Jan 69
AFR 205-1 & Para 2-17(b)

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

If inclosure [redacted] is withdrawn (or not attached), the classification of this correspondence will be downgraded to [redacted] in accordance with AFR 205-1.

UNCLASSIFIED

[redacted]

JOINT MESSAGEFORM

RESERVED FOR COMMUNICATION CENTER

[redacted] UNCLASSIFIED

TYPE MSG	BOOK	MULTI	SINGLE

PRECEDENCE

ACTION

INFO

DTG

FROM: 3ADIV ANDERSEN AFB GUAM

TO: ADC (Air Mail)

AFSC (Air Mail)

CSAF (Air Mail)

OSAF WASH DC (Air Mail)

INFO: SAC (Air Mail)

SPECIAL INSTRUCTIONS

Classification Cancelled
(or changed to [redacted])
Auth. Director USDP
By
Date 15 May 69
AFR 205-1 para 2-17(4)
3 Jan 68

[redacted] DI 00827 JUL 66. AFSC FOR FOREIGN TECHNOLOGY DIVISION; CSAF FOR AFCIN; OSAF FOR SAFOI;SAC FOR DIE. SUBJ: (U) FAA RADAR PHENOMENON (UFO). PART I OF VI PARTS. RADAR BEACON RETURNS WITH NO KNOWN OR IDENTIFIABLE SOURCE HAVE BEEN NOTED BY THE GUAM FAA CONTROLLERS, USING FPS-20 SURVEILLANCE RADAR, SINCE OCT 1965. INFORMATION WAS TOO SKETCHY FOR REPORTING UNTIL THE MONTH OF JUNE, WHEN THE FREQUENCY OF RADAR SIGHTINGS INCREASED RAPIDLY. OCCURRENCES ARE CONTINUING TO DATE. PHENOMENA OCCURRENCE TIMES WERE OCT 65 (ONE), NOV 65 (TWO), DEC 65 (ONE), MAR 66 (ONE), APR 66 (THREE), AND JUN 66 (NINETEEN). THE MOST

DOWNGRADED AT 12 YEAR INTERVALS; NOT AUTOMATICALLY DECLASSIFIED

GROUP 3

DATE	TIME
11	
MONTH	YEAR
JUL	1966
PAGE NO.	NO. OF PAGES
1	

TYPED NAME AND TITLE	PHONE	RELEASER	SIGNATURE
L/Col Schroeder, DIC	66-5176		C. L. Lowell

(TYPED [or stamped] NAME AND TITLE)
CHARLES L. LOWELL, Colonel, USAF
Director of Intelligence

[redacted] REGRADING INSTRUCTIONS GP3

FORM [illegible]73

REPLACES EDITION OF 1 MAY 55 WHICH MAY BE USED

UNCLASSIFIED

ABBREVIATED JOINT MESSAGEFORM
and/or CONTINUATION SHEET

SECURITY CLASSIFICATION [redacted]

PRECEDENCE	RELEASED BY	DRAFTED BY	PHONE
ACTION	UNCLASSIFIED		
INFO			

INFORMATIVE OBSERVATION WAS MADE 27 JUN 66, AT 1445Z WITH A SIGNIFICANT AIR INTERCEPT. PART II. FOLLOWING PRELIMINARY ANALYSIS HAS BEEN MADE OF THIS PHENOMENA: ALFA. THREE FOURTHS OF THE OCCURRENCES WERE AT NIGHT. BRAVO. AVERAGE TIME ON SCOPE WAS APPROX TEN MINUTES. COCA. ALL DISPLAYED AS BEACON IFF MODE THREE WITH VARIOUS CODES, NO CORRELATION TO COURSE. ONE THIRD ALSO DISPLAYED INTERMITTENT SKIN PAINT. DELTA. OVER HALF WERE FIRST DETECTED WITHIN 10NM OF ANDERSEN AFB 350/33NM. ONLY ONE RETURN OVERFLEW THE NORTH COAST OF GUAM BEFORE TURNING OUTBOUND. IN MOST CASES CLOSEST APPROACH WAS 25NM NORTH OF GUAM. ALL BUT TWO HAD NORTHWEST EXIT TRACKS. THREE FOURTHS HAD EXIT HDG 310 DEGREES PLUS MINUS 10 DEGREES. ECHO. APPARENT GROUND SPEED READOUT MADE 20 TIMES. MAX SPEED WAS APPROX 500K, MIN SPEED 40K. EIGHTY-FIVE PERCENT WERE LESS THAN 250K. FOXTROT. FIVE ALTITUDE READOUTS WERE OBTAINED, WITH READINGS FROM 20,000 TO 1,000 FEET NOTED. GOLF. WEATHER CONDITIONS WERE TYPICAL FOR THIS AREA AND NOT A FACTOR WITH RADAR BEACON RETURNS. PART III. INTERCEPT ATTEMPTS WERE MADE 23 JUN 66, AT 0000Z (1800 LOCAL) USING AIRBORNE KC-135 AND C-97 ACFT. THE KC-135 WAS AT 15,000 FEET IN THE CLEAR, WITH THE BEACON PHENOMENA

CONTROL NO.	TOR/TOD	PAGE NO.	NO OF PAGES	MESSAGE IDENTIFICATION	INITIALS
		2	6		

REGRADING INSTRUCTIONS GP3 [redacted] CLASSIFICATION

DD FORM 1 NOV 63 173-1 REPLACES EDITION OF 1 MAY 55 WHICH MAY BE USED

UNCLASSIFIED

ABBREVIATED JOINT MESSAGEFORM and/or CONTINUATION SHEET		SECURITY CLASSIFICATION [redacted]	
PRECEDENCE ACTION INFO	RELEASED BY UNCLASSIFIED	DRAFTED BY	PHONE

AT 20,000 FEET. NO SIGHTING WAS MADE. THE C-97 WAS VFR AT 4,600 FEET, SAME ALTITUDE AS MEASURED AT THAT TIME FOR THE BEACON PHENOMENON, AND PASSED DIRECTLY OVER IT OR INTO IT TWICE WITHOUT VISUAL CONTACT. PART IV. AN ADDITIONAL INTERCEPT ATTEMPT, THE MOST SIGNIFICANT TO DATE, WAS MADE 27 JUN 66, AT 1445Z (28/0045 LOCAL) BY AN ANDERSEN AFB AIR RESCUE SQUADRON C-130, CALL SIGN PILE 75, EQUIPPED WITH APS-59. PILOTS WERE CAPT JOE KRAUPKA AND CAPT PETE GLEESON; VERY RELIABLE AND OBJECTIVE OBSERVERS. CONTACT WAS MAINTAINED FOR TWENTY MINUTES AT APPROX 2,000 FEET, AND NUMEROUS INTERCEPTS WERE ATTEMPTED. IT WAS A CLEAR MOONLIT NIGHT WITH SCATTERED CUMULUS AT FLIGHT LEVEL WHICH WAS TOO THIN TO PAINT ON THE RADAR. FOLLOWING SIGNIFICANT ITEMS WERE REPORTED BY THE FLIGHT CREW: ALFA. THE CREW USED "PENCIL BEAM" ON THEIR APS-59 RADAR, GIVING ACCURATE HOMING CAPABILITY. BRAVO. RADAR CONTACT MAX RANGE WAS 6NM. THE RETURN WAS IN THE FORM OF A NARROW SERIES OF DOTS SUCH AS AN ELECTRICAL IMPULSE WOULD GIVE. IT WAS APPROX ONE NM LONG ON THE SCOPE AND ALWAYS ORIENTED IN LINE WITH THE CENTER OF THE RADAR SCOPE. COCA. VECTORS CALLED BY THE GROUND RADAR

CONTROL NO.	TOR/TOD	PAGE NO.	NO. OF PAGES	MESSAGE IDENTIFICATION	INITIALS
		3	6	UNCLASSIFIED	
REGRADING INSTRUCTIONS ---				SECURITY CLASSIFICATION [redacted]	

ABBREVIATED JOINT MESSAGEFORM and/or CONTINUATION SHEET

SECURITY CLASSIFICATION [redacted]

PRECEDENCE	RELEASED BY	DRAFTED BY	PHONE
ACTION		UNCLASSIFIED	
INFO			

CONTROLLER CHECKED PERFECTLY WITH THE RETURN IDENTIFIED ON THE AIRBORNE RADAR. A THIRD RADAR FPS-6 HEIGHT FINDER ALSO WAS IN OPERATION AND HAD THE RETURN. DELTA. THE CREW HOMED IN ON AND FLEW THROUGH THE RETURN REPEATEDLY WITH NO VISUAL CONTACT. THEY REPORTED THAT THERE SEEMED TO BE A CLOUD ASSOCIATED WITH THE TARGET AT ALL TIMES, AND NEVER THE SAME CLOUD. WHENEVER THEY TRIED TO SPOT IT VISUALLY IT WAS ALWAYS IN A CLOUD. ECHO. THE TARGET WAS LOST TO BOTH THE FAA AND AIRBORNE RADAR AT THE SAME TIME, 1515Z. AT THAT TIME IT WAS 322/56NM FROM ANDERSEN AFB. PART V. ADDITIONAL INFORMATION AS APPLICABLE, REQUIRED BY AFR 200-2, IS SUBMITTED AS FOLLOWS: (A) MULTIPLE RETURNS WERE NOTED ONLY ONCE, 19 JUN 66 1445Z, WHEN ONE RETURN BECAME STATIONARY AND WAS JOINED BY A SECOND BEACON AND INTERMITTENT SKIN PAINT RETURN TO WITHIN ONE HALF MILE OF EACH OTHER. THE FIRST RETURN APPEARED TO ORIGINATE FROM A SURFACE VESSEL AT 1438Z. ONLY REPORTED INCIDENT OF THIS . RETURNS MOVED AWAY AND WERE AT ANDERSEN 323/58 AND 322/64 WHEN CONTACT WAS LOST ON BOTH OF THEM AT THE SAME TIME, 1459Z. (B) RETURNS WERE FIRST NOTED 4 OCT 65 BY THE ANDERSEN AFB FAA SURVEILLANCE RADAR OPERATORS. AT FIRST THERE WAS A POSSIBLE CORRELATION TO ARC LIGHT LAUNCHES

CONTROL NO.	TOR/TOD	PAGE NO.	NO OF PAGES	MESSAGE IDENTIFICATION	INITIALS
		4	6		

REGRADING INSTRUCTIONS DD [redacted] SECURITY CLASSIFICATION [redacted]

DD FORM 1 NOV 63 173-1 REPLACES EDITION OF 1 MAY 55 WHICH MAY BE USED

AND RECOVERIES, BUT THIS HAS BEEN DISPROVED. OBJECTS FADED FROM THE RADAR SCOPES AT VARIOUS RANGES, USUALLY 50 TO 70 MILES NORTH WEST OF ANDERSEN AFB. THEY REMAINED ON THE RADAR SCOPE UP TO THIRTY MINUTES, AVERAGING OVER TEN MINUTES. (C) AIRBORNE RADAR CONTACT ONLY ONE DATE, 27 JUN 66, USING APS-59. GROUND ELECTRONICS USED WERE FPS-20 SURVEILLANCE IN ALL CASES AND FPS-6 HEIGHT FINDER WHEN AVAILABLE. NO VISUAL SIGHTINGS HAVE BEEN MADE EXCEPT THE REPORTED CLOUD ON 27 JUN. TARGET APPEARS TO BE OF AN ELECTRICAL NATURE ONLY. (D) SIGHTINGS, ALL TIMES ZULU, WERE MADE 04/1537 OCT 65, 06/1054 NOV 65, 10/2027 NOV 65, 24/1005 DEC 65, 20/1020 MAR 66, 05/1321 APR 66, 27/1257 APR 66, 28/1420 APR 66, AND IN JUN 66 AT 01/1538, 02/1530, 03/1508, 07/0856, 07/1154, 11/0905, 12/0207, 13/0057, 13/1812, 18/1657, 19/1406, 19/1438, 19/1439, 22/1424, 23/0732, AND 27/1445. HEIGHT FINDING RADAR CONFIRMED SURVEILLANCE RADAR ON ALL SEVEN OCCASIONS THAT IT COULD BE MADE OPERATIONAL ON TIME, ALL SINCE 7 JUN 66. ONLY TWO OCCURRENCES WERE IN MID-DAY, ONE AT EARLY MORNING AND THREE LATE DAY. ALL OTHERS WERE AT NIGHT. (E) ANDERSEN AFB, GUAM, (F) IN ADDITION TO FLIGHT CREW REPORT, PRACTICALLY ALL OF THE

ABBREVIATED JOINT MESSAGEFORM and/or CONTINUATION SHEET

SECURITY CLASSIFICATION [redacted]

PRECEDENCE	RELEASED BY	DRAFTED BY	PHONE
ACTION		UNCLASSIFIED	
INFO			

FAA CONTROLLERS HAVE WITNESSED THIS PHENOMENA. MR. WILFRID F. GEHRKIN, AGE 53, ADDRESS: GUAM CERAP, C/O FAA, ROUTE 008, AGANA, GUAM, SUPERVISORY AIR TRAFFIC CONTROL SPECIALIST, IS RECOMMENDED AS THE MOST QUALIFIED OBSERVER. ALL FAA OBSERVERS ARE CONSIDERED HIGHLY QUALIFIED AND RELIABLE. (G) WEATHER CONDITIONS NOT CONSIDERED AS A FACTOR DUE TO RADAR BEACON RETURNS. (H) ONLY OTHER UNUSUAL ACTIVITY OR CONDITION IS THE FACT THAT THE SOVIET TRAWLER, IZMERITEL, IS MAINTAINING STATION OFF THE COAST OF GUAM. (I) INTERCEPTION ACTIONS AS REPORTED. (J) NO BALLOON RELEASES AND NO OTHER KNOWN TRAFFIC IN THE AREA EXCEPT AS REPORTED. (K) PREPARING OFFICER IS LT COL HOWARD R. SCHROEDER, FR15510, CHIEF, COMBAT INTELLIGENCE DIVISION, DIRECTORATE OF INTELLIGENCE. PRELIMINARY ANALYSIS AS REPORTED PREVIOUSLY. (L) NO PHYSICAL EVIDENCE EXISTS. PART VI. INVESTIGATION IS CONTINUING, BUT AT PRESENT ARE UNABLE TO EXPLAIN THIS PHENOMENON. REQUEST ANY INFO YOU MAY HAVE WHICH WOULD ASSIST IN INVESTIGATION. GP3

CONTROL NO.	TOR/TOD	PAGE NO.	NO. OF PAGES	MESSAGE IDENTIFICATION	INITIALS
		6	6		

REGRADING INSTRUCTIONS

SECURITY CLASSIFICATION [redacted]

DD FORM 1 NOV 53 173-1 REPLACES EDITION OF 1 MAY 53 WHICH MAY BE USED.

UNCLASSIFIED