1. DATE - TIME GROUP	2. LOCATION
23 May 53 23/1543Z	Lackland AFB, Texas
3. SOURCE Military	**10. CONCLUSION** AIRCRAFT
4. NUMBER OF OBJECTS More than 5	Wire requesting AF Form 112 and Elect Data Sheet sent for more information. Aircraft F-47 (Mexico) engaged in cloud seeding.
5. LENGTH OF OBSERVATION 1 Hour 5 Minutes	**11. BRIEF SUMMARY AND ANALYSIS** A number of blips appeared on radar screen traveling in a N direction for 40 or 50 miles and then began to orbit. Object appeard to be at an estimated altitude of 35,000 ft.
6. TYPE OF OBSERVATION Ground-Radar	
7. COURSE North	
8. PHOTOS ☐ Yes ☒ No	
9. PHYSICAL EVIDENCE ☐ Yes ☒ No	

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

AF FORM 112
APPROVED 1 JUNE 1946

[redacted] UNCLASSIFIED

Auth Air A Mexico
Class Off
26 Aug 1953

3

COUNTRY	REPORT NO.	(LEAVE BLANK)
Mexico Multiple	IR-324-53	AF-579390 6

AIR INTELLIGENCE INFORMATION REPORT

ATIC

SUBJECT
Unidentified Aerial Objects

23 0843 CST Monclova Mexico

AREA REPORTED ON	FROM (Agency)
Mexico	Air Attaché, Mexico City, Mexico

DATE OF REPORT	DATE OF INFORMATION	EVALUATION
26 August 1953	25 August 1953	B-2

PREPARED BY (Officer)	SOURCE
Major Sigurd L. Jensen, Jr., Asst Air Attaché	General [redacted]

REFERENCES (Control number, directive, previous report, etc., as applicable)
SRI - Control No. TIC-5111 dated 4 August 1953

SUMMARY: (Enter concise summary of report. Give significance in final one sentence paragraph. List inclosures at lower left. Begin text of report on AF Form 112—Part II.)

1. The following is in response to SRI-TIC-5111 dated 4 August 1953.

2. On 25 August, the writer, on a periodic visit to Mexican Air Force headquarters, engaged in conversation with General [redacted] the [redacted] of the Mexican Air Force.

3. During the conversation, it was learned the MAF, in cooperation with the Secretariat of Agriculture, sent a number of F-47 type aircraft with MAF pilots to the Monclova area of Mexico to engage in cloud seeding in an effort to promote rainfall there. The aircraft were operating in that region during the time of the reported observation. It is felt, therefore, that objects observed could have been these aircraft operating at altitude in cloud seeding operations.

SIGURD L. JENSEN, Jr.
Major, USAF
Assistant Air Attaché

APPROVED:

William K. Skaer
WILLIAM K. SKAER
Colonel, USAF
Air Attaché

"Reproduction and numbered distribution in local series is authorized when total additional distribution list is furnished the Directorate of Intelligence, Hq USAF, Attn: AFOIN-1B, Washington 25, D. C."

1R

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

0 INCLS.

ATIC 140844

TIC-5111

Cy 1 Series "A"

DISTRIBUTION BY ORIGINATOR
Copies 1 and 2 - Office of Air Attaché, Mexico City, Mexico; Copy 3 - CMDR CAIRC, Albrook AFB, CZ.

0-158/3
6 Oct 53

UNCLASSIFIED

NOTE: THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT, 50 U. S. C. — 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. IT MAY NOT BE REPRODUCED IN WHOLE OR IN PART, BY OTHER THAN [redacted] FORCE AGENCIES, EXCEPT BY PERMISSION OF THE DIRECTOR OF INTELLIGENCE, USAF.

[redacted]

16—53302-3 U. S. GOVERNMENT PRINTING OFFICE

[redacted]

CLASSIFICATION

UNCLASSIFIED

IN REPLY REFER TO: CONTROL NO. TIC-5111

SPECIFIC REQUEST FOR INFORMATION

DATE

SUBJECT: [redacted] Unidentified Aerial Objects

[redacted]

AUTH: COMDR, ATIC
BY: M.J. Piatnitza, Lt. Col.
DATE: 16 July 1953

TO: AA/Mexico UNCLASSIFIED

FROM: Headquarters USAF
Directorate of Intelligence
Washington 25, D. C.

DEGREE OR NEED FOR THE FOLLOWING SPECIFIC INFORMATION

- ☐ URGENT - REQUESTED BY _____ OTHERWISE CANNOT BE USED
- ☐ GREAT - DESIRED BY _____ OR AS SOON THEREAFTER AS POSSIBLE
- ☒ ROUTINE - DESIRED AS EARLY AS PRACTICABLE

1. Request the intelligence material described below be furnished this Headquarters, ATTN: Director of Intelligence, bearing the Control Number TIC-5111 UNCLASSIFIED
2. On any documents requested, this office has indicated whether loan or retention copies are desired by using one of the following remarks: ("Loan"); ("Retention if possible, otherwise loan"); or ("Retention only"). UNCLASSIFIED

3. A report has been received from a radar site at San Antonio, Texas concerning a radar observation of five or more targets which appeared to be orbiting over Monclova Mexico (125 miles NNW of Monterrey) from 0843 CST to 0926 CST, 23 May 1953. The number and maneuvers of the targets suggested military flying. They appeared on the radar scope as convertial aircraft and intermittent contact was maintained for 39 minutes. Altitude was estimated to be over 20,000 ft; no speed estimate was possible. Airfields in that vicinity are located at Monclova, Monterrey and Rosita. [redacted]

UNCLASSIFIED

4. If circumstances permit, and at the discretion of the AA/Mexico, it is requested that information be obtained to determine whether Mexican aircraft were in the area at the time of sighting. [redacted]

UNCLASSIFIED

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DOD DIR 5200.10

REMARKS (Including guidance, if appropriate)
Ok - Robert M. Olson Lt.

UNCLASSIFIED

INCLS:

[redacted]

T53-8309

CLASSIFICATION

FOR USE OF THE ORIGINATOR AE5/RM0/RC1/EL4

REQUESTED BY	NAME	BRANCH OR SECTION	ROOM NUMBER	PHONE
	Mr. Weyland/jww	ATIRC-1	B263C	51279

SUGGEST CHECK WITH	ALREADY CHECKED WITH	DATE	APPROVED BY
		22 JUL 1953	

FOR COLLECTION USE

CHECKED FOR DUPLICATION	COORDINATED WITH
	[redacted]

Patrick J. Ross, Major
Chief, Collection Control Branch
Air Technical Intelligence Center

[redacted]

CLASSIFICATION

AFHQ FORM 0-228 23 JUN 49 PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

UNCLASSIFIED ((SECRET (AUTH: CO, ATIC
BY: H.C. Johnston
Lt Col, USAF
DATE 22 June 1953

REQUEST FOR AIR TECHNICAL INTELLIGENCE INFORMATION

THRU: ATIAE FROM: ATIAE-5 DATE: 22 June 1953
THRU: ATIA
TO: ATIRC-1

UNCLASSIFIED

SUBJECT: (Uncl) Unidentified Aerial Objects

1. PERTINENT BACKGROUND INFORMATION:

(Secret) ATIC has received a report from a radar site at San Antonio, Texas concerning a radar observation of targets over Mexican territory from 0843 CST to 0926 CST, 23 May 1953. Five or more targets appeared to be orbiting over Monclova, Mexico, which is 125 miles NNW of Monterrey. They appeared on the radar scope as conventional aircraft and intermittent contact was maintained for 39 minutes. Altitude was estimated to be over 20,000 ft. No speed estimate was possible.

2. SPECIFIC REQUEST:

(Uncl) It is requested that you determine if Mexican aircraft were in the area at the time of sighting. The number and maneuvers of the targets suggest military flying. There are fields at 1) Monclova, 2) Monterrey, and 3) Rosita, Mexico, which can be checked.

3. REMARKS:

T53-7294

ORIGINATED BY:	APPROVED	APPROVED:
Lt R. M. Olsson	H.C. JOHNSTON, Lt Col, USAF	RAY W. McDUFFEE, Col, USAF
COORDINATED WITH:	Chief, Electronics Branch	Chief, Technical Analysis Div
ATIAA		
ATIAE		
ATIAS	Chief, ATIAA	Chief, ATIA
ATIAS	Date:	Date:

ATIC Form 317 (19 Nov 51)
(Formerly MCI Form 17)

Auth: ATICOI 200-10.16

(If additional space is required, continue on reverse side.)

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DOD DIR 5200.10

SECURITY INFORMATION UNCLASSIFIED SECRET

UNCLASSIFIED

DISPOSITION FORM

SECURITY CLASSIFICATION (If any): SECRET

FILE NO.

SUBJECT: (Uncl) Transmission of Radar Sighting

TO: ATIAE-2
ATTN: Mr. James

FROM: ATIAE-5

DATE: 17 June 1953

COMMENT NO. 1

A/1C T.G.Futch/jos
65365/B263A/P A10

1. Inclosed is all the information received by ATIAE-5 concerning a radar sighting on 23 May 1953 in the vicinity of Lackland Air Force Base, Texas. Adiabatic charts have been requested in order to check the possibility of weather conditions having caused such a sighting.

2. Request you comment on what could have caused the unidentified radar targets.

Robert M. Olsson

ROBERT M. OLSSON, 1st Lt, USAF
Acting Chief, Aerial Phenomena Section

1 Incl
File dated 23 May 1953
Lackland AFB, Texas

If inclosure #1 is withdrawn (or not attached), the classification of this correspondence will be downgraded to Unclassified in accordance with paragraph

Note:

Mr. James stated to Lt R.M. Olsson that the inclosed radar information would seem to support the fact that aircraft caused this sighting. He suggested that we check on Mexican airfields in the area. He stated that no calculation of the speed of the objects was possible.

Mr. James stated on 21 July 1953 after reviewing the newly recieved adiabatic chart that this sighting possibly was caused by weather effects on radar.

22 July 1953
Robert Olsson

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DOD DIR 5200.10

UNCLASSIFIED

SECURITY INFORMATION

SECRET

ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

UNCLASSIFIED

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

TO:

CG SAAMA KELLY AFB TEX

INFO:

DATE-TIME GROUP: 22-3003 JUNE 53

[redacted]

PRECEDENCE FOR: ACTION | INFORMATION

ROUTINE

☐ BOOK MESSAGE ☐ ORIGINAL MESSAGE

☐ MULTIPLE ADDRESS

CRYPTOPRECAUTION ☐ YES ☐ NO

REFERS TO MESSAGE:

IDENTIFICATION: SAIP-284

CLASSIFICATION: [redacted]

UNCLASSIFIED

FROM: AFOIN-ATIAE-6-15-E

Reference your message SAIP-284. In regard to observation of white light observed over San Antonio, Texas, on 16 June 53, ATIC agrees with your evaluation. ATIC also emphasizes the importance of attempting an evaluation at reporting level such as you have done. To give you a background of Project Blue Book evaluations, sightings of 19 May at Ellington AFB, Texas, and 23 May at Lackland AFB, Texas, have been evaluated as probably aircraft by ATIC specialists.

No reply is required.

In reply cite Project Blue Book.

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

COORDINATION:

ATIAE-5 _____ Date _____
Lt Olsson

ATIAE _____ Date _____
Col Johnston

ATIA _____ Date _____
Col McSuffee

UNCLASSIFIED

[redacted]

SECURITY CLASSIFICATION [redacted]

PAGE 1 OF 1 PAGES

DRAFTER'S NAME (and signature, when required): LT R.M. OLSSON/vc

RELEASING OFFICER'S SIGNATURE

SYMBOL: ATIAE-5

TELEPHONE: 65366

OFFICIAL TITLE: ROBERT C. BROWN, MAJOR, USAF AIR ADJUTANT GENERAL

DD FORM 1 OCT 49 173 REPLACES NME FORM 173, 1 MAY 43, WHICH MAY BE USED.

16—56823-3 ☆ U. S. GOVERNMENT PRINTING OFFICE

ATIAE-5 File

THIS MESSAGE REQUIRES PARAPHRASE
SEE CRYPTO-CENTER BEFORE DECLASSIFYING

THIS MESSAGE REQUIRES PARAPHRASE
SEE CRYPTO-CENTER BEFORE DECLASSIFYING

dc DDL 7z

SECURITY INFORMATION

MAY 53

UNCLASSIFIED BK

1-ATIC-ACTION
2-
3-
INFO

C2 PRIORITY SECRET

FROM 741 AC AND W SQ TINKER AFB OKLA

TO CG AMC WPAFB OHIO

HQ USAF WASH DC ATIAA-2C

ADC ENT AFB COLO

UNCLASSIFIED ACTION COPY

1. Atia
2. Atic.
3. G. files

PRIORITY

CNO

CITE 7 K1 J-S. IN ACCORD WITH AFL 200-5 (FLYOB RPT) PARA 1 SCOPE PICTURE FIRST TRACK N-94 INDICATED AT LEAST 5 OR MORE ACFT APPROX 35000 FEET. SPEED APPROX 240 KNOTS FLYING IN A NORTHERLY DIRECTION FOR 40 OR 50 MILES THEN BEGAN TO ORBIT. FORMATION FADED IN SAME LOCALTTE POSSIBLY DUE TO LOSS OF ALT. PARA 2 TOTAL TIME OBSERVED WAS 1 HR AND 5 MINS. FIRST SIGHTING 1543Z 23 MAY CURR. PARA 3 ELECOBS SPEED APPROX 240 KNOTS. ALT ESTIMATED 35000 FEET. TYPE OF ACFT, EITHER LARGE GROUP OF FTRS OR SMALL GROUP OF BOMBERS. ELEC EQUIP USED: AN/FPS-3 RADAR. PARA 4 LOCATION OF OBSERVER 741 ACW SQ LACKLAND AFB TEXAS. ACFT WAS SIGHTED NEAR MONCLACA MEXICO, 101 DEGS, 102 DEGS, 27 DEGS, 28 DEGS NORTH. PARA 5 TRINED ACFT CONTRS. PARA 6 WCGHOT, CLOUD COND 3000 SCTD WINDS 20 KNOTS 200 DEG AT 40000 FEET PARA 7 POSSIBLE TEMP INVERSION (NOT DEFINITE) PARA FIGHT SCOPE FILMS PARA 9 (DUTO BORDER VIOLATION) PARA 10 NONE KNOW

DOWNGRADED AT 3 YEAR INTERVA
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

SECRET

53MC-41826-1

1) Was there definitely a temp inv and if so at what alt
2) Weather Recon on the same frequency ??
3) Stable Air in the area - Local Flight Service

UNCLASSIFIED

ROUTING

JOINT MESSAGEFORM

UNCLASSIFIED

COMMUNICATIONS CENTER NO. [redacted]

AUTH: CG ATIC
BY: W.E. Fensler
DATE: 28 May 1953

UNCLASSIFIED

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

TO: ~~CG TINKER AF BASE OKLAHOMA CITY OKLAHOMA~~

DATE-TIME GROUP	SECURITY CLASSIFICATION
281430Z MAY 53	[redacted]

PRECEDENCE FOR:	ACTION	INFORMATION
	ROUTINE	

☐ BOOK MESSAGE ☐ ORIGINAL MESSAGE

☐ MULTIPLE ADDRESS CRYPTOPRECAUTION ☐ YES ☐ NO

REFERS TO MESSAGE:

IDENTIFICATION	CLASSIFICATION
262100Z May 53	[redacted]

INFO:

UNCLASSIFIED

FROM: AFCIN-ATIAE-E FOR 741 AC&W Sq

Reference your message dated 262100Z May on unidentified radar targets seen at your station. Request you complete an Air Force Form 112 as per Air Force Letter 200-5 with specific reference to the following points: 1) Was there a temperature inversion and, if so, at what altitude? 2) Was there another AC&W Squadron on the same frequency? 3) State aircraft activity in the area. Under separate cover you will receive an Electronics Data Sheet which will complete the information on the radar sighting. Request you forward scope photos with Air Force Form 112.

In reply cite Project Blue Book.

note - Form 112 dated 27 May has been received - 10 June 1953 RWG.

COORDINATION:

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DOD DIR 5200.10

Electronics Data Sheet not included.

[redacted] T53-6366-

UNCLASSIFIED

SECURITY CLASSIFICATION [redacted]

PAGE 1 OF 1 PAGES

DRAFTER'S NAME (and signature, when required): 1/Lt R.M. Olsson/jos

RELEASING OFFICER'S SIGNATURE: BARBARA P. HANAWALT, 1st Lt, USAF ASST AIR ADJUTANT GENERAL

SYMBOL: ATIAE-5 TELEPHONE: 65365

OFFICIAL TITLE

DD FORM 1 OCT 49 173 REPLACES NME FORM 173, 1 MAY 48, WHICH MAY BE USED.

15—58933-2 ☆ U. S. GOVERNMENT PRINTING OFFICE

UNCLASSIFIED

DIRECTORATE OF INTELLIGENCE
HEADQUARTERS
33D AIR DIVISION (DEFENSE)
TINKER AIR FORCE BASE, OKLAHOMA

DODI 319.1 3 June 1953

SUBJECT: AF Form 112 - Air Intelligence Information Report

TO: Chief, Air Technical Intelligence Center
ATTN: ATIAA-2c
Wright-Patterson Air Force Base, Ohio

Transmitted in compliance with AFL 200-5, dated 29 April 1952, one copy for information of Air Intelligence Information Report of Unidentified Flying Object sighted at Monelova, Mexico, 27 May 1953.

Harold K Korsland
1 ST LT USAF
for JOSEPH W. CARAWAY
Major, USAF
Director of Intelligence

1 Incl
1. AF Form 112-Part I (2 cys)

AF FORM 112—PART I
APPROVED 1 JUNE 1949

COUNTRY: United States of America

UNCLASSIFIED

REPORT NO. 744-53-1

(CLASSIFICATION)

CG 33RD ADV (DEF)
DATE 24/5/53 Initials

AIR INTELLIGENCE INFORMATION REPORT

SUBJECT: Unidentified Aircraft

AREA REPORTED ON: Monclova, Mexico (GP-5547)

DATE OF INFORMATION: 23 May 1953

FROM (Agency): 74lst AC&W Sq, Lackland AFB, Texas

PREPARED BY (Officer): 27 May 1953

SOURCE: A-3

REFERENCES (Cite by number, title, date, publication, etc., or "Original"): None

AF Radar & GAA

SUMMARY: (Enter concise summary of report. Give significance in final one-sentence paragraph. List inclosures at lower left. Begin text of report on AF Form 113—Part II.)

1. An unidentified track (N94) containing five (5) or more aircraft at an estimated altitude of 35,000 Ft. or over. At 1507Z another unidentified track (N97) was picked up at DN4018 heading North. This target containing three (3) or more aircraft, went into orbit. At 1526Z contact was made with track number N3 at DN3031, and also, at this same time, contact was made at DN1950 with track number N4, and at 1529Z contact was made at DN 1005 with track number N5. None of these targets, though quite large in size, appeared to be making any directional progress, but rather seemed to stay in a definite orbit as if in the process of grouping.

2. First track was sighted at 0843 CST, 23 May 1953. At 0907 CST the second track was sighted. Third track was sighted 0926 CST. Number four track was sighted at same time of number three track. Number five track was sighted at 0929 CST.

3. 74lst AC&W Sq, Lackland AFB, Texas. 0843

4. AN/FPS-3 Radar Unit.

5. Trained Air Force Personnel. Controllers, Captain Ralph S. Hoggatt, CWO Edwin R. Robinson, Sr. Radar Operator, Ray E. Duncan, A/2C.

6. Weather at the time: Hot, Cloud Condition 3,000 Ft. Scattered Winds, 20 Knots, 200° at 40,000 Ft. Temperature Inversion (Not Def).

7. None.

8. Photographs were taken with scope cameras. Development of film revealed camera mal-function.

9. None due to possible border violation.

10. San Antonio ARTCC was immediately contacted by commercial telephone for possible identification. ARTCC advised that Del Rio had no aircraft in that area and that Laredo had a flight of aircraft whose mission was to make touch-and-go-landings at Eagle Pass, Texas, however, they should not be in the questioned area.

Ralph S. Hoggatt

Ralph S. HOGGATT, Captain, USAF
Intelligence Officer

INCLS

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DOD DIR 5200.10

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RESTRICTED
BY AUTHORITY OF CG, 33RDADV
BY [illegible]
DATE 29 MAY 53

3 copies forwarded to CG, Headquarters Air Division (Defense) Tinker AFB, Oklahoma

NOTE: THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT, 50 U.S.C.—31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. IT MAY NOT BE REPRODUCED IN WHOLE OR IN PART, BY OTHER THAN UNITED STATES AIR FORCE AGENCIES, EXCEPT BY PERMISSION OF THE DIRECTOR OF INTELLIGENCE, USAF.

Encl #1
00264

SECRET
(CLASSIFICATION)

☆ U.S. GOVERNMENT PRINTING OFFICE : 1950 O—916331

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[redacted]

COORDINATION

INSERT ORGNL CODE AND FULL SIGNATURE

AUTH: CG ATIC
BY: W.E. FENSLER
DATE: 26 May 1953

In reply refer to
AFCIN-ATIAE-5

29 MAY 1953

RMO/JOS/65365

SUBJECT: (Uncl) Radar Sighting of Unidentified Object

TO: Commanding Officer
Tinker Air Force Base
Attn: 741st AC&W Sq
Oklahoma City, Oklahoma

1. With respect to a sighting made at your radar station on 23 May 1953 1543Z, the Air Technical Intelligence Center is forwarding the inclosed Electronics Data Sheet. In an attempt to uncover a logical explanation for such observations of unidentified objects, ATIC has developed this questionnaire which, when completed accurately by the radar technicians involved, allows ATIC radar specialists to attempt an evaluation of the sighting.

2. This Center would, therefore, appreciate the completion and forwarding of the subject Data Sheet with an Air Force Form 112 at your earliest possible convenience. Your original message states that a radar scope photo was taken and ATIC requests that you forward the same.

FOR THE COMMANDING GENERAL

1 Incl
a/s

BARBARA P. HANAWALT
1st. Lt., USAF
Asst. Adjutant

Joseph A. Calhoun
1st ATIA
28 May 53

C.J. Jimmerson
ATIAD
28 May 53

W.E. Fensler
L. Olson
ATIAE-5
28 May '53

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VAC

[redacted]

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OFFICIAL FILE COPY

DESIGNATE AUTHD OFFICE OF RECO

T53-6400

[redacted] UNCLASSIFIED [redacted]

CLASSIFIED SECRET
BY AUTHORITY OF
CG-33ADIV (DEF)
DATE 12 Jan 53 Initials

741ST AIRCRAFT CONTROL AND WARNING SQUADRON
Lackland Air Force Base
San Antonio, Texas

319.1

UNCLASSIFIED

SUBJECT: (Uncl) Radar Sighting of Unidentified Object

TO: Commanding General
Air Technical Intelligence Center
Wright-Patterson Air Force Base
Dayton, Ohio

1. In compliance with your letter AFO1N-AT1AE-5 dated 29 May 1953, the inclosed form's are submitted.

2. AF form 112 was submitted to your Headquarters through channels on 27 May 1953.

3. When the attached inclosures is withdrawn or not attached, the classification of SECRET on this correspondence will be cancelled in accordance with paragraph 25a, AFR 205-1, 9 October 1950.

FOR THE COMMANDING OFFICER:

Thomas L. Hill
THOMAS L HILL
1st Lt, USAF
Adjutant

2 Incls
1. AF Form 112 (1 cy)
2. AF Form 322 (1 cy)

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[redacted]

[redacted]

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0099A

T53-7189

UNCLASSIFIED

[redacted]

UNCLASSIFIED

~~CLASSIFIED SECRET~~
BY AUTHORITY OF
CG 33RD ADIV (DEF)
DATE 11 Jun 53 Initials

AF FORM 112—PART I
APPROVED 1 JUNE 1948

COUNTRY	REPORT NO.	(LEAVE BLANK)
United States of America		

AIR INTELLIGENCE INFORMATION REPORT

SUBJECT
Unidentified objects

AREA REPORTED ON	FROM (Agency)
Monclova, Mexico	741st AC&W Sq. Lackland AFB, Texas

DATE OF REPORT	DATE OF INFORMATION	EVALUATION
11 June 1953	23 May 1953	

PREPARED BY (Officer)	SOURCE
Capt. Ralph S. Hoggatt, Intell. Officer	AN/FPS Radar Observation.

REFERENCES (Control number, directive, previous report, etc., as applicable)
None

SUMMARY: (Enter concise summary of report. Give significance in final one-sentence paragraph. List inclosures at lower left. Begin text of report on AF Form 112—Part II.)

1. Appeared to be either a large group of small planes or a small group of four motor planes.
2. 0843 CST.
3. 741st AC&W Sq. Lackland AFB, San Antonio, Texas. (29° 24' N 98° 38' W)
4. AN/FPS-3 Radar.
5. Observers were all quallified Air Force trained technicians.
6. 2 SCTD 15 SSE 9 990
7. None
8. Pictures were taken by scope camera, but due to camera malfunction pictures did not turn out.
9. None, due to possible violation of continental boundries.
10. All civilian air lines were contacted and had no aircraft in that vicinity.

Ralph S. Hoggatt
RALPH S. HOGGATT
CAPT. USAF
INTELLIGENCE OFFICER

_____ INCLS.

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[redacted]

T53-7089A

14—88880-1 ☆ U. S. GOVERNMENT PRINTING OFFICE : 1950 O—918331

SECRET
UNCLASSIFIED SECURITY INFORMATION
UNCLASSIFIED
CLASSIFIED SECRE
BY AUTHORITY OF
CG 33rd DIV (DEF)
DATE 6 Jun 53 Initials

ELECTRONICS DATA SHEET
(GROUND RADAR)

The purpose of this questionnaire is to provide technical data for evaluating the report of an unusual radar target or track. It is requested that it be completed as accurately as possible.

When not filled in, the form is Unclassified. The reporting officer will use his own judgement as to what degree of classification is required.

It is preferred that the answers to the questions be typewritten, however, if it will expedite the completion of the form, the answers may be printed in ink. If additional space is needed, use reverse side of form.

1. STATION OBSERVING TARGET:
741 ST. AC & W SQ?
Organization
LACKLAND AFB. SAN ANTONIO, TEXAS
Location

2. DATE OF THIS REPORT:
9 JUNE 1953
Day Month Year

3. DATE TARGET OBSERVED:
23 MAY 1953 Local Time ☐ Z Time ☐
Day Month Year
Time-Local 0843 CST Time-Z 1443 Z

4. NAME, RANK AND ORGANIZATION OF REPORTING OFFICER:
CAPT. RALPH S. HOGGATT
741st AC & W SQ.
LACKLAND AFB. SAN ANTONIO, TEXAS

5. EXACT LOCATION OF STATION (COORDINATES):
29° 24' N 98° 38' W

6. OBSERVER DATE (LIST EACH OBSERVER):

	Name	Rank	Duty	No. of Years Exp. in Radar
A.	HOGGATT, RALPH. S.	CAPT.	OPERATIONS OFFICER	2
B.	SCHUMACHER, ELMER J.	1stLT.	DUTY CONTROLLER	2
C.	ROBINSON, EDWIN R.	CWO	CONTROLLER TRAINEE	2½
D.	COLLINS, JAMES J.	S/SGT.	CREW CHIEF	7
E.	DUNCAN, RAY E.	A/2C	SCOPE OPERATOR	4

7. WAS A VISUAL SIGHTING MADE BY ANY PERSONNEL OF THE STATION? ☐ YES ☒ NO
IF SO, GIVE NAME AND RANK OF ALL PERSONNEL MAKING A VISUAL SIGHTING AND A BRIEF DESCRIPTION OF WHAT THEY SAW:

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DOD DIR 5200.10

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ATIC FORM 332 (REVISED 25 NOV 1952)
SECURITY INFORMATION

CLASSIFIED SECRET
BY AUTHORITY OF
DATE 10 JUN 53

8. HAVE YOU HEARD OF ANYONE NOT AT THE RADAR STATION MAKING A VISUAL SIGHTING AT APPROXIMATELY THE SAME TIME THE RADAR CONTACT WAS MADE? ☐ YES ☒ NO
IF SO, GIVE NAME AND ADDRESS.

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

9. RADAR SCOPE PHOTOS: SEE REMARKS
IS RADAR EQUIPPED WITH A SCOPE CAMERA? ☒ YES ☐ NO
WAS CAMERA OPERATIONAL? ☒ YES ☐ NO
WERE SCOPE PHOTOS TAKEN? ☒ YES ☐ NO
WERE PRINTS OF THE SCOPE PHOTOS FORWARDED TO THE AIR TECHNICAL INTELLIGENCE CENTER? ☐ YES ☒ NO

10. TRACK DATA:
WHAT WAS THE NUMBER OF THE TRACK? N97N N3N N4N N5N N94N N9N
WAS A PERMANENT PLOT MADE OF THE TRACK AT THE TIME OF THE OBSERVATION? ☒ YES ☐ NO

11. WERE AIRCRAFT SCRAMBLED TO INTERCEPT THE TARGET? ☐ YES ☒ NO
IF SO, WERE THE AIRCRAFT BEING OBSERVED ON THE SCOPE AT THE SAME TIME AS THE TARGET? ☐ YES ☐ NO

12. WERE ANY NEARBY RADAR INSTALLATIONS QUERIED WHETHER THEY HAD OBSERVED THE SAME TARGET OR TRACK? ☐ YES ☒ NO
IF SO, WHICH STATIONS?

13. WAS THE TARGET OBSERVED ON SEARCH RADAR? ☒ YES ☐ NO
IF SO, WHAT IS THE NOMENCLATURE OF THE EQUIPMENT? AN/FPS 3

14. WAS THE TARGET OBSERVED ON HEIGHT FINDING RADAR? ☐ YES ☒ NO
IF SO, WHAT IS THE NOMENCLATURE OF THE EQUIPMENT?

15. HAVE THERE BEEN ANY RECENT MAINTENANCE DIFFICULTIES? ☐ YES ☒ NO
IF SO, DESCRIBE.

16. WHAT TYPE MODULATOR (I.E., SPARK GAP, HARD TUBE, ETC.) IS USED IN THE RADAR EQUIPMENT?
THYATRON-PULSE MODULATOR

17. WAS THE AFC (AUTOMATIC FREQUENCY CONTROL) CIRCUIT OPERATING PROPERLY? ☐ YES ☒ NO
COMMENTS:
OPERATING MANUALLY

18. HAS INTERFERENCE FROM ANOTHER RADAR SET BEEN OBSERVED RECENTLY: ☐ YES ☒ NO
COMMENTS:

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SECRET
UNCLASSIFIED SECURITY INFORMATION
CLASSIFIED SECRET
BY AUTHORITY OF
CG 33 ADIV (DEF)
DATE 26 Jun 53 INITIALS

19. ARE PERSONNEL FAMILIAR WITH THE EFFECTS CAUSED BY AN INTERFERING SIGNAL? ☒ YES ☐ NO
COMMENTS:

20. ARE PERSONNEL FAMILIAR WITH THE EFFECTS OF ANOMALOUS PROPAGATION (DUCTING EFFECTS) AS THEY PERTAIN TO THIS TYPE OF RADAR? ☒ YES ☐ NO

21. HAS ANOMALOUS PROPAGATION (DUCTING EFFECT) BEEN OBSERVED TO EXTEND THE RANGE OF THE GROUND CLUTTER OF THIS RADAR AT THIS SITE? ☒ YES ☐ NO
COMMENTS:

22. WAS ANOMALOUS PROPAGATION (DUCTING EFFECT) EXTENDING THE RANGE OF THE GROUND CLUTTER AT THE TIME THE TARGET WAS OBSERVED? ☐ YES ☒ NO
COMMENTS:

23. HOW DID THE TARGET APPEAR IN SIZE AND SHAPE AS COMPARED TO CONVENTIONAL AIRCRAFT TARGETS?

SAME SIZE AND SAME SPEED

24. PERFORMANCE OF TARGET:

a. REMAINED CONSISTENT IN SIZE	☒	CHANGED SIZE RAPIDLY	☐
b. SPEED WAS CONSTANT	☒	SPEED WAS VARIABLE	☐
c. FOLLOWED CONSISTENT TRACK	☒	APPEARED, DISAPPEARED, THEN REAPPEARED IN NEW LOCATION	☐
d. FUZZY COMPARED TO AIRCRAFT TARGET	☐	SHARP COMPARED TO KNOWN AIRCRAFT TARGET	☐
e. SAME AS AIRCRAFT TARGET	☒		

25. WERE OTHER TARGETS (KNOWN) OBSERVED IN THE SAME GENERAL AREA, AT APPROXIMATELY THE SAME TIME AND AT THE SAME ALTITUDE AS THE UNUSUAL TARGET? ☐ YES ☒ NO
IF SO, DESCRIBE.

26. WHAT TYPE INDICATORS ("A" SCOPE, "B" SCOPE, ETC.) WERE USED TO FOLLOW THE TARGET?

PPI

DESCRIBE THE SIGNAL:

27. WHAT WAS THE RADAR SCAN RATE? 3.3 R.P.M.

28. WHAT WAS THE FREQUENCY OF THE TRANSMITTER?

UPPER BEAM 1292 MEG. LOWER BEAM 1259 MEG.

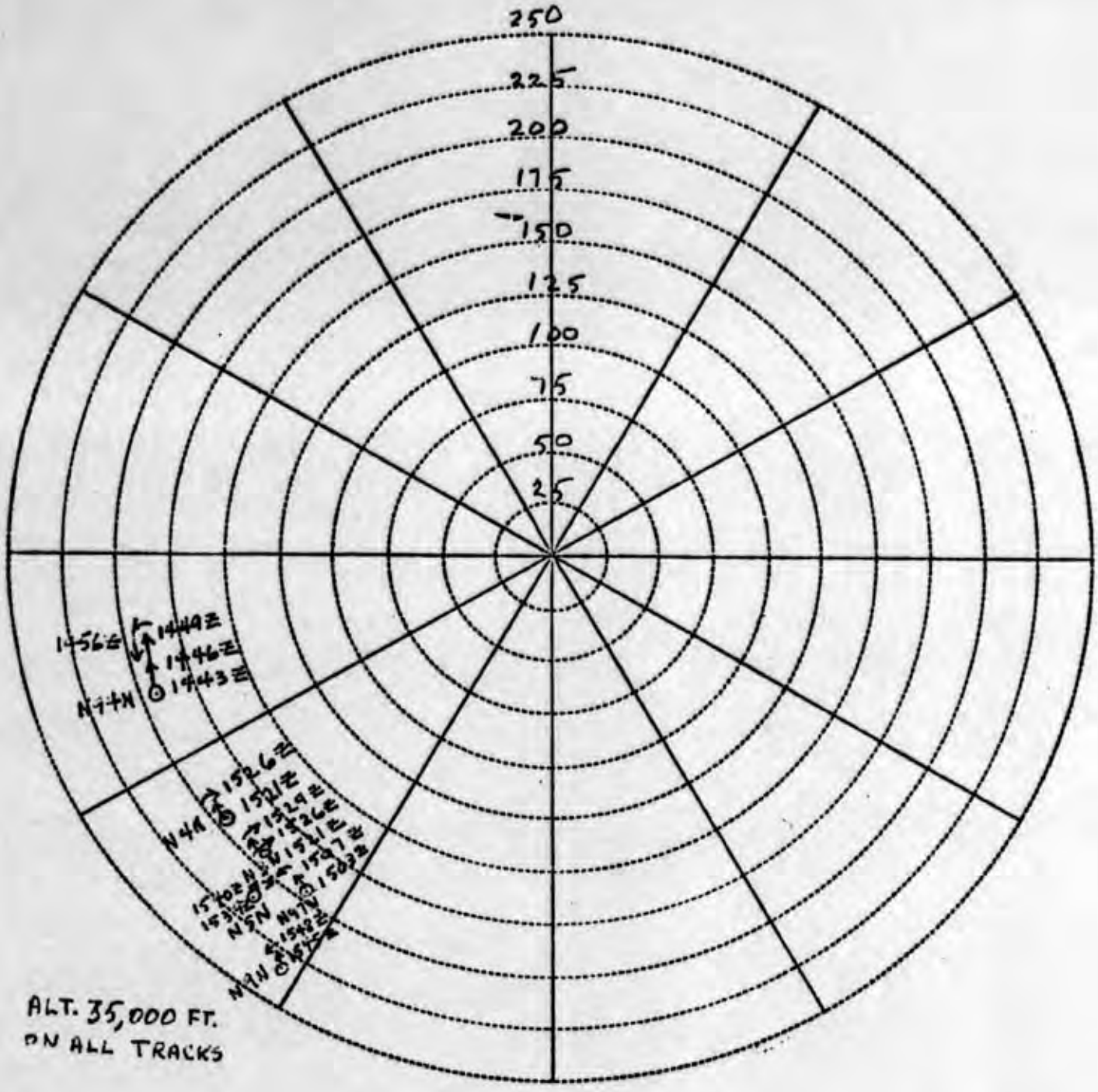
29. DID ANY OF THE OBSERVERS HAVE ANY OPINIONS AS TO THE NATURE OF THE TARGET? ☐ YES ☐ NO
IF YES, GIVE THEIR NAMES AND OPINIONS BELOW.

GENERAL OPINION OF OBSERVERS, DEFINITELY AIRCRAFT. POSSIBLY OF MEXICAN ORIGAN, BUT NOT POSITIVE. ACCORDING TO THE CALIBRATION DATA, UNDER NORMAL CONDITIONS ALTITUDE OF AIRCRAFT WOULD BE BETWEEN 30,000 to 40,000 FT.

SECURITY INFORMATION
DOWNGRADED AT 3 YEAR INTERVAL
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10
SECRET UNCLASSIFIED

SECRET
SECURITY INFORMATION
CLASSIFIED
CLASSIFIED SECRET
BY AUTHORITY OF
CG. 33 ADIV (TJZF)

30. IF SCOPE PHOTOS ARE NOT AVAILABLE, PLOT THE TARGET TRACK AS ACCURATELY AS POSSIBLE. GIVE THE TIME AND ALTITUDE (IF MEASURED) FOR EACH POINT PLOTTED. PUT THE NECESSARY RANGE SCALE ON THE DIAGRAM.



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

UNCLASSIFIED

ATIC FORM 332 (REVISED 25 NOV 1952)

SECURITY INFORMATION
SECRET

CLASSIFIED SECRET
BY AUTHORITY OF
CG, AMIV (DEF)
DATE 10 Jun 53 Initials

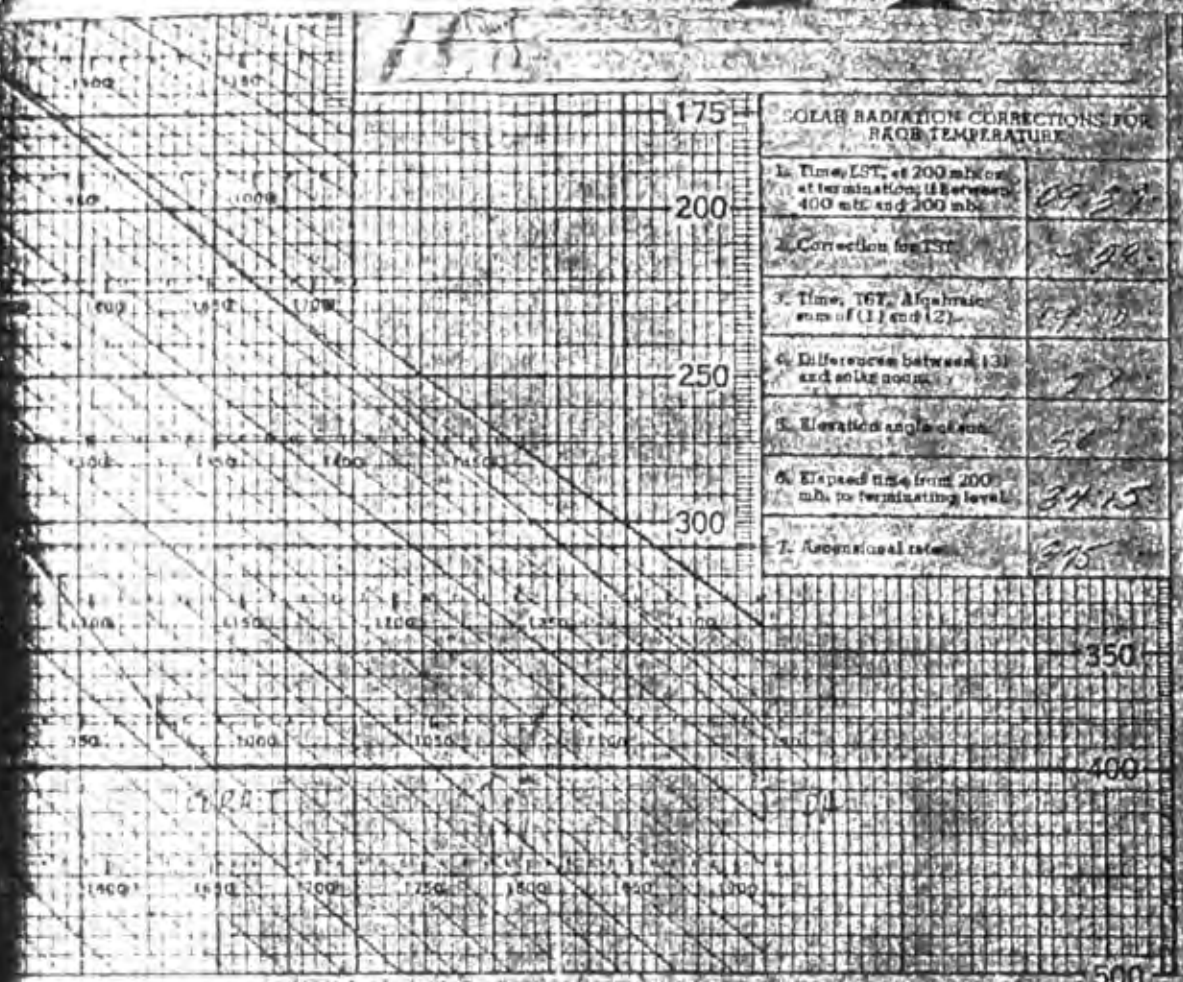
31. USE THIS SHEET FOR ANY COMMENTS, OPINIONS OR ADDITIONAL DATA NOT COVERED BY THE QUESTIONS.

#9. SCOPE PHOTO'S UNREADIBLE DUE TO CAMERA MALFUNCTION.

AS

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

This case includes two (2) 16" x 16" photocopied charts and two (2) 15" x 18½" photocopied charts.



SOLAR RADIATION CORRECTIONS FOR RAOB TEMPERATURE	
1. Time, LST, at 200 mb. or at termination, if between 400 mb. and 200 mb.	09:37
2. Correction for TST	-28
3. Time, TST, Algebraic sum of (1) and (2)	09:10
4. Differences between (3) and solar noon	2.9
5. Elevation angle of sun	56°
6. Elapsed time from 200 mb. to terminating level	34:15
7. Ascensional rate	375

PUNCHED CARD NO.

PUNCHED CARD NO.

Drawn by: E. Winot

Verified by: E. C. Kiusbe

Inspected by:

DATE AND RELEASE TIME

	Year	Month	Day	Time
90	1953	MAY	23	[illegible]
[illegible]	1953	MAY	23	[illegible]

Rad. geocode No. 333936 Ascension No. 3 0 9

DATA BLOCK B

Code Check	Level No.	PRESSURE Corrected	PRESSURE mb	TEMPERATURE Observed	TEMPERATURE Assigned (ice)	TEMPERATURE Corrected	TEMPERATURE Dew Point	RELATIVE HUMIDITY Observed	RELATIVE HUMIDITY Including Correction +5%	DEW POINT °C	TEMPERA
SIGNIFICANT LEVELS											
	9	1450	478	418	-34.5	-0.5	-41.4	46	46	46	
	10	1460	504	246	-33.1	-0.6	-41.0	-46	46	46	
	11	1420	505	258	-41.3	-0.1	-42.6				
	12	1200	524	208	-51.6	-0.8	-52.4				
	013	1260	486	168	-60.0	-0.8	-60.8				12160
	14	1380	407	265	-21.4	-1.1	-22.5				16160
55	24	1414	46	47	-27.9	-1.3	-29.2				19410
	16	1440	468	150	-62.0	-1.6	-63.6				
	017	1460	55	188	-55.3	-2.1	-57.4				20150
	18	1500	28	288	-54.0	-5.5	-59.3				21526

CODED MESSAGE FOR TRANSMISSION

25515	20184	25393	21174	20165
07993	07914	25648	15971	07923
10440	25991	07955	20922	06200
01010	66681	03624		

SOLAR RADIATION CORRECTIONS FOR RAOB TEMPERATURES

1. Time, LST, at 200 mb, or at tropopause, if between 400 mb and 200 mb	
2. Correction for LST	
3. Time, LST, Algebraic sum of (1) and (2)	
4. Difference between (3) and sunset time	
5. Elevation angle of sun	
6. Elapsed time from 200 mb (or tropopause) to sunset	
7. Acceptable? yes	

CONSTANT PRESSURE DATA

DATE AND RELEASE TIME

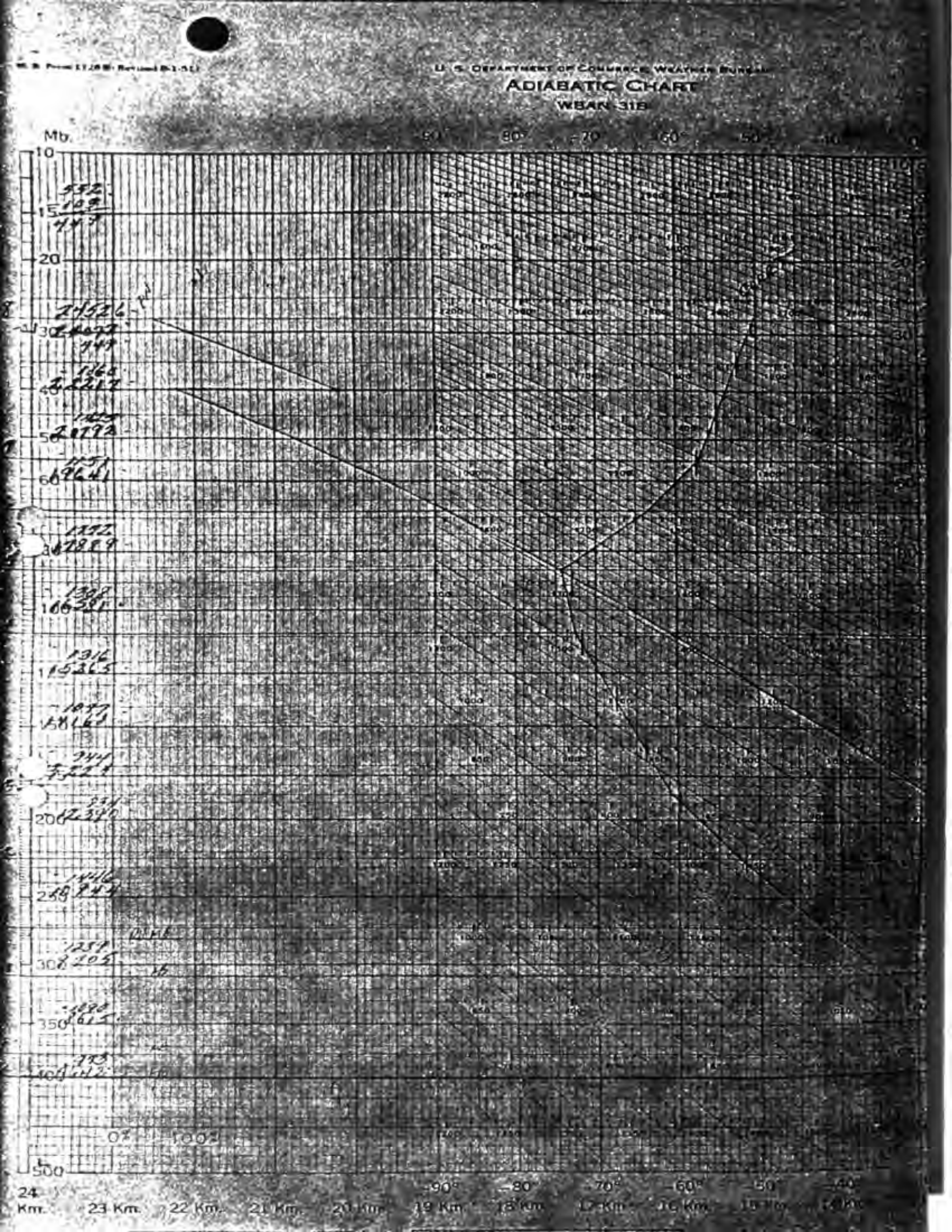
-30° -20° -10° 0° 10° (°C.)

13 Km 12 Km 11 Km 10 Km 9 Km 8 Km 7 Km 6 Km 5 Km

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

ADIABATIC CHART

WBAN 318



DATA BLOCK B

Code Check	Level No.	PRESSURE (Geopot.)	PRESSURE (mb.)	Quality	TEMPERATURE Ascent (°C)	TEMPERATURE Correction	TEMPERATURE Corrected	RELATIVE HUMIDITY Original	RELATIVE HUMIDITY Including Correction	DEW POINT °C	REMARKS
	SIGNIFICANT LEVELS										
	1	950	478	416	-242	-0.2	-244	16	16	16	
	10	1660	509	340	-334	-6.6	-340	16	16	16	
	11	1120	372	283	-413	-6.1	-420				
	12	1200	324	244	-516	-0.8	-524				
013	1260	286	164	-600	-0.8	-608				12760	
514	1320	109	105	-714	-1.1	-725				16100	
5595	1414	16	44	-929	-1.3	-942				10470	
16	440	68	150	-620	-4.6	-656					
507	1460	55	188	-553	-2.1	-524				2015	
518	1580	28	256	-450	-5.3	-503				24576	

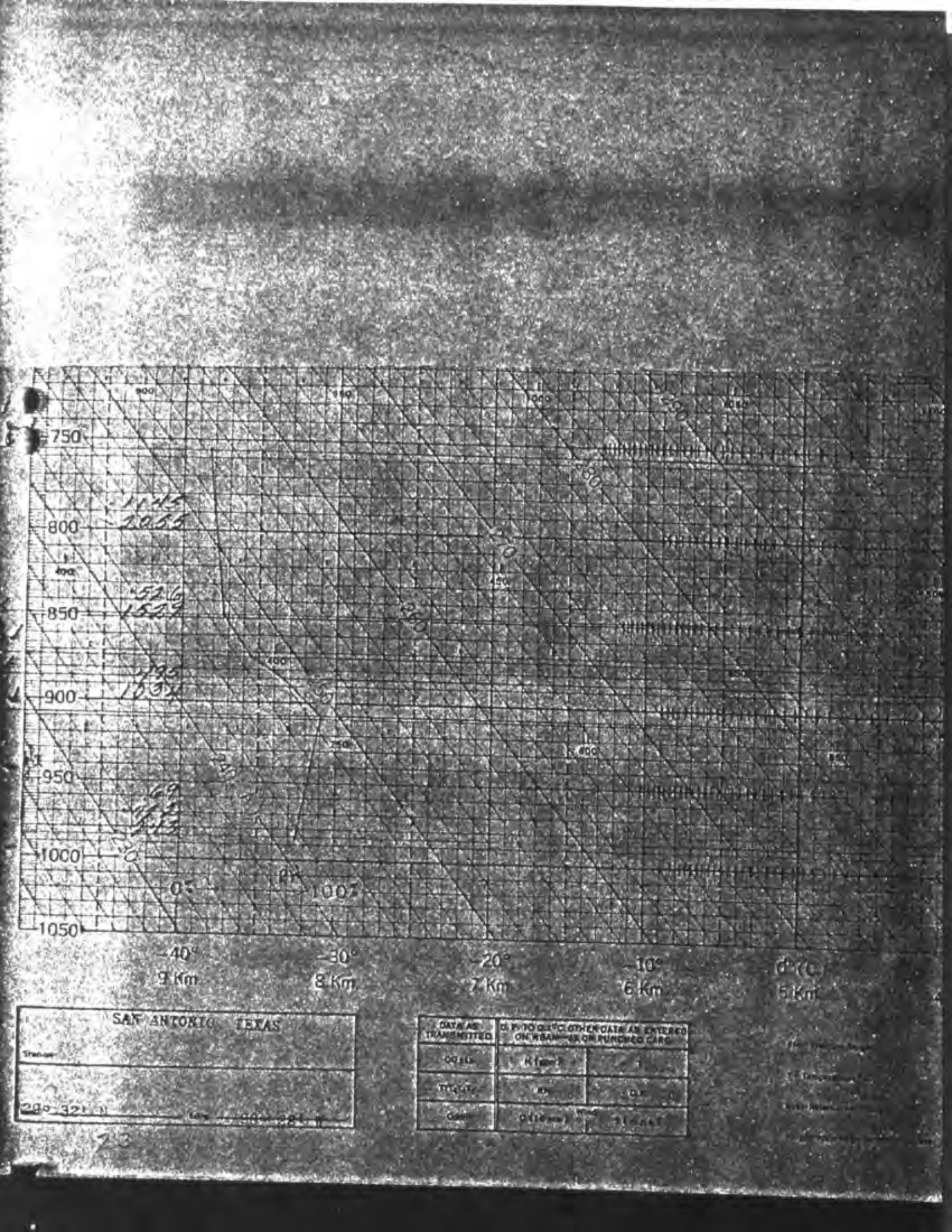
CODED MESSAGE FOR TRANSMISSION

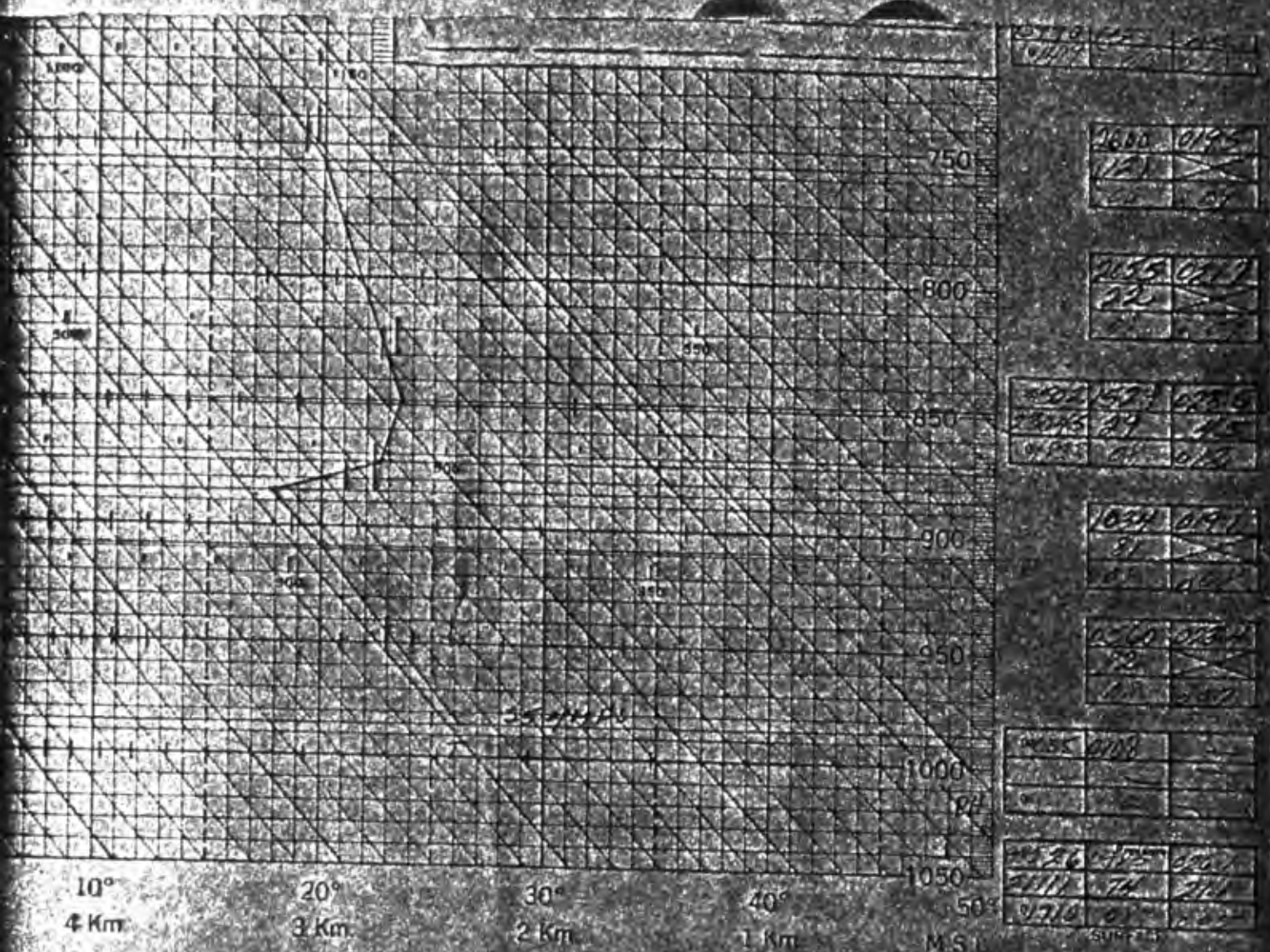
25365	20184	85999	02114	20065
07991	01911	25648	15997	02353
10440	22991	22935	02122	06201
01010	66066	03624		

SOLAR RADIATION CORRECTIONS FOR EACH TEMPERATURE

1. Time [ST] at 200 mb. or at termination if between 400 mb. and 200 mb.	
2. Correction for [ST]	
3. Time [ST] Algebraic sum of (1) + (2)	
4. Difference between (3) and solar noon	
5. Elevation angle at sun	
6. Elapsed time from 300 mb. or terminating level	
7. Accumulated rate	

CONSTANT PRESSURE DATA


750
800
850
900
950
1000
1050
-40°
9 Km
-30°
8 Km
-20°
7 Km
-10°
6 Km
0°(C)
5 Km
SAN ANTONIO TEXAS



Drawn by L. Wilmot

Checked by G.E. Denney

Approved by

DATE AND RELEASE TIME

	Year	Month	Day	Time
[illegible]	1951	MAY	23	[illegible]
[illegible]	1959	MAY	23	[illegible]

Exhibit No. 333936

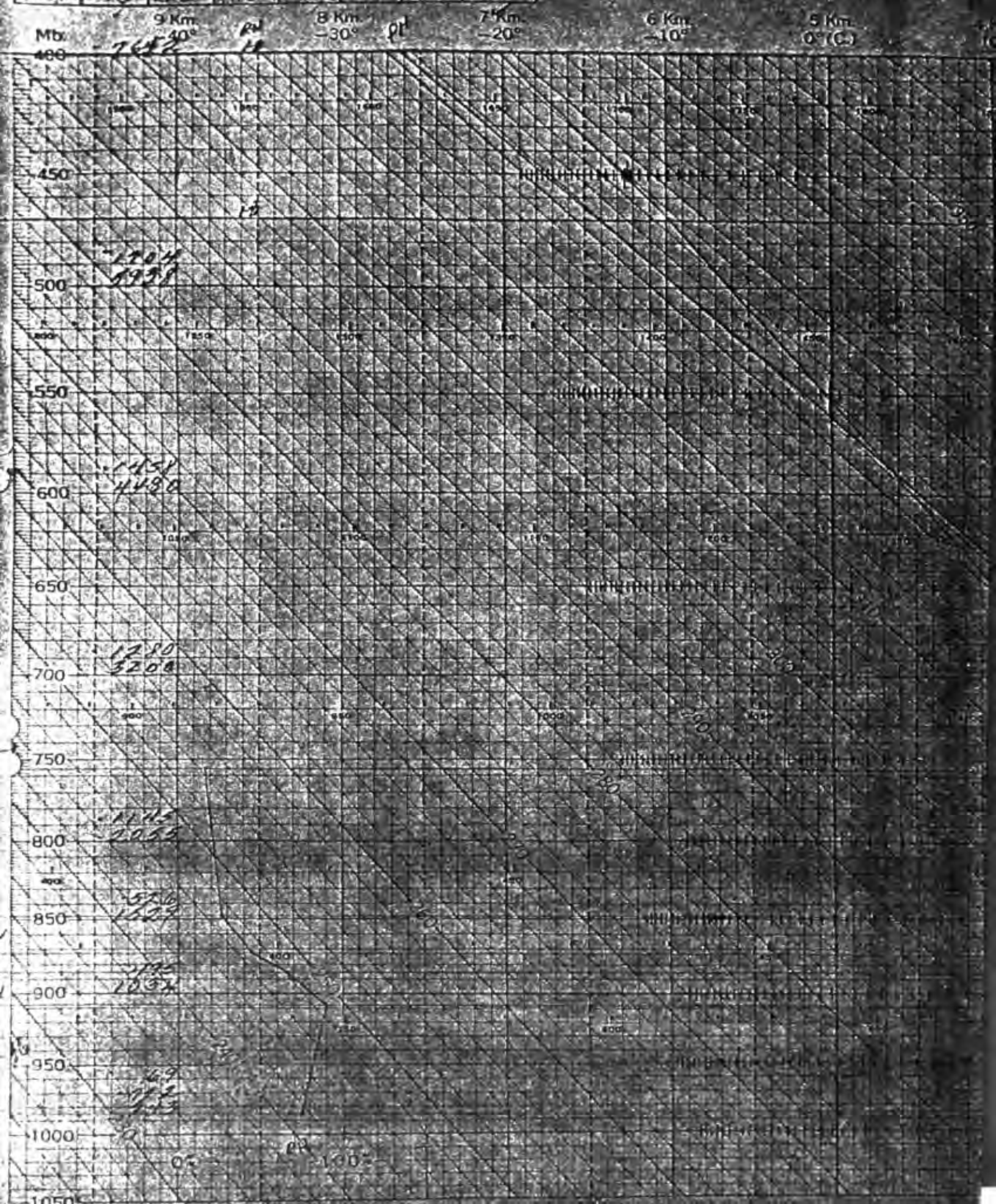
U. S. DEPARTMENT OF COMMERCE, WEATHER BU...

ADIABATIC CHART

WBAN-31A

...URE CHECK READINGS

Time G.C.E.	TEMPERATURE Ordinate	Dry	Wet	RELATIVE HUMIDITY Ordinate	Recd.	Cor.	Psychrometer Ice / Water
1438	7.6	22.6	34.6 °C	[illegible]	69	[illegible]	[illegible]



... WEATHER BUREAU

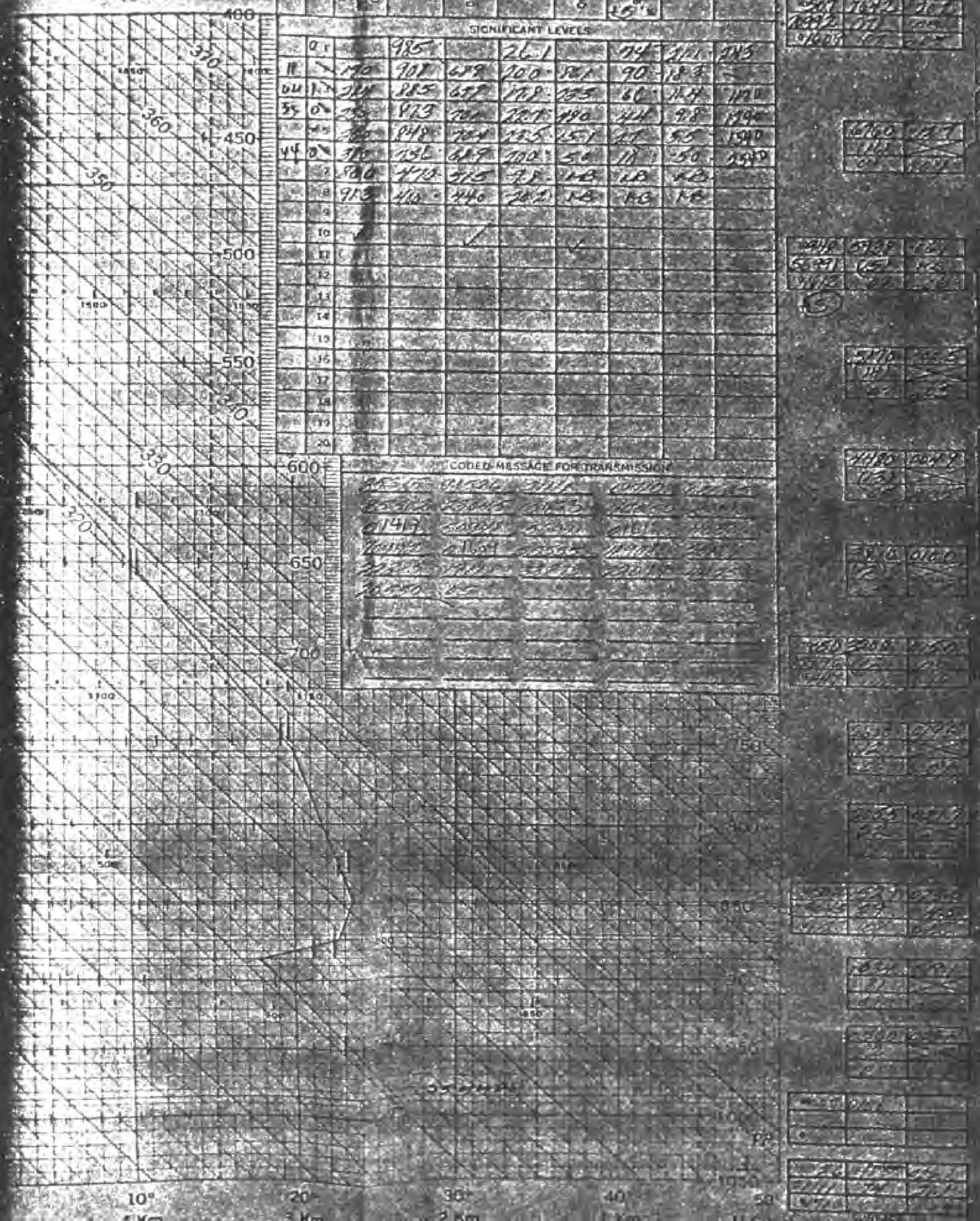
CHART

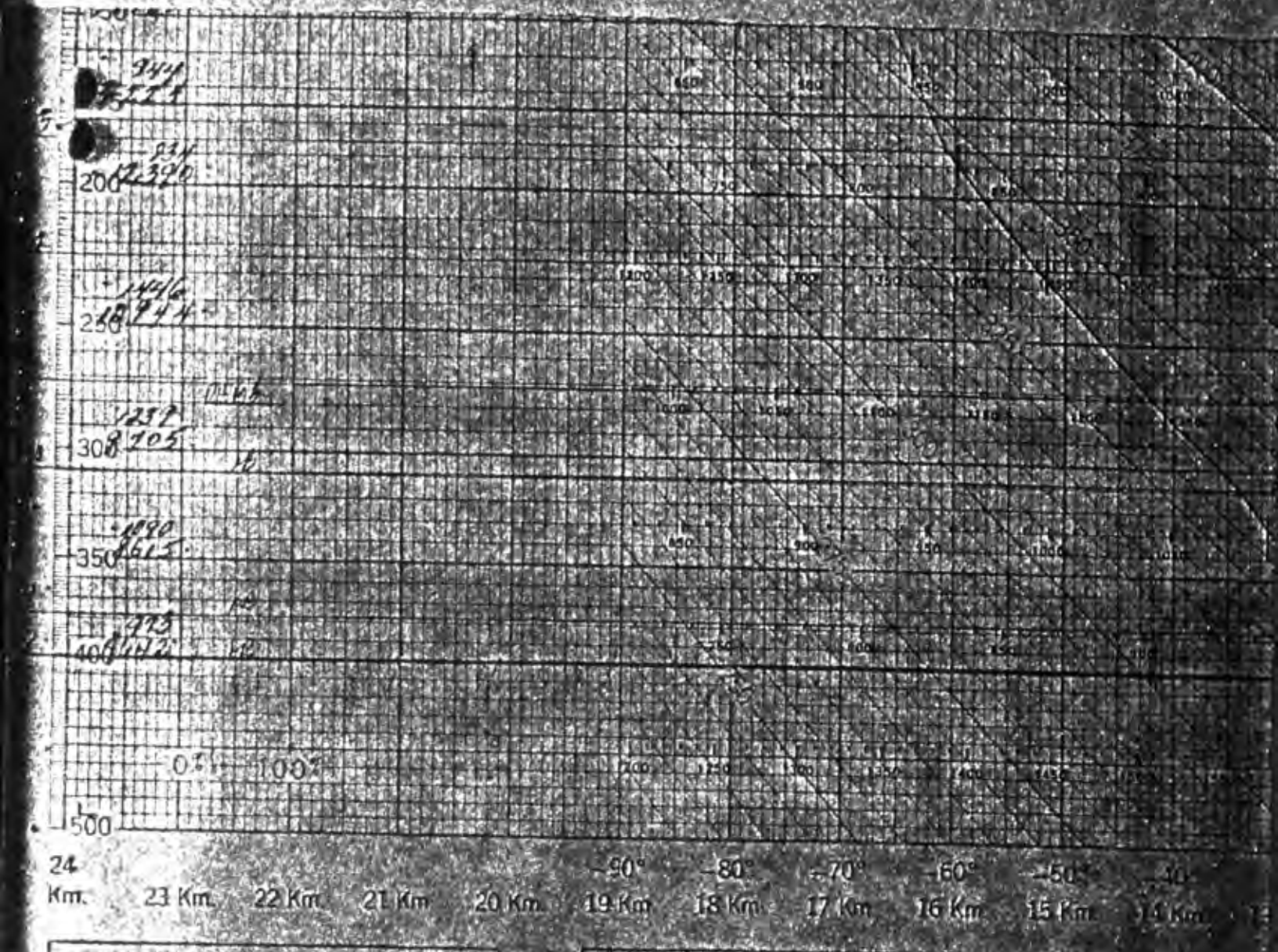
DATA BLOCK A

Code No.	Level No.	Pressure	Pressure (mb)	Temperature	Temperature (°C)	Relative Humidity	Relative Humidity (%)	Dew Point (°C)	Remarks
SIGNIFICANT LEVELS									
	0		985		26.1		79	21.1	2?5
11	1	170	908	659	20.0	981	90	18.3	
04	2	[illegible]	885	655	17.8	755	60	11.4	1170
35	3	[illegible]	873	[illegible]	[illegible]	440	44	9.8	[illegible]
	4	[illegible]	848	[illegible]	22.5	151	[illegible]	5.5	1510
44	5	[illegible]	735	659	20.0	56	18	-5.0	[illegible]
	7	980	470	315	7.8	MB	MB	MB	
	8	913	[illegible]	440	28.2	MB	MB	MB	
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

CODED MESSAGE FOR TRANSMISSION

[illegible]





SAN ANTONIO, TEXAS (Municipal)	
Station	
Lat. 29° 32' N	Long. 58° 28' W

DATA AS TRANSMITTED	D.P. TO 0.1°C OTHER DATA AS ENTERED ON WEAN-1 OR PUNCHED CARD	
Cross	N (cover)	
Visibility		
Odor	O (1 in sec)	(2 in sec)

Station SAN ANTONIO TEXAS

Lat. Long.

U. S. DEPARTMENT OF COMMERCE, W

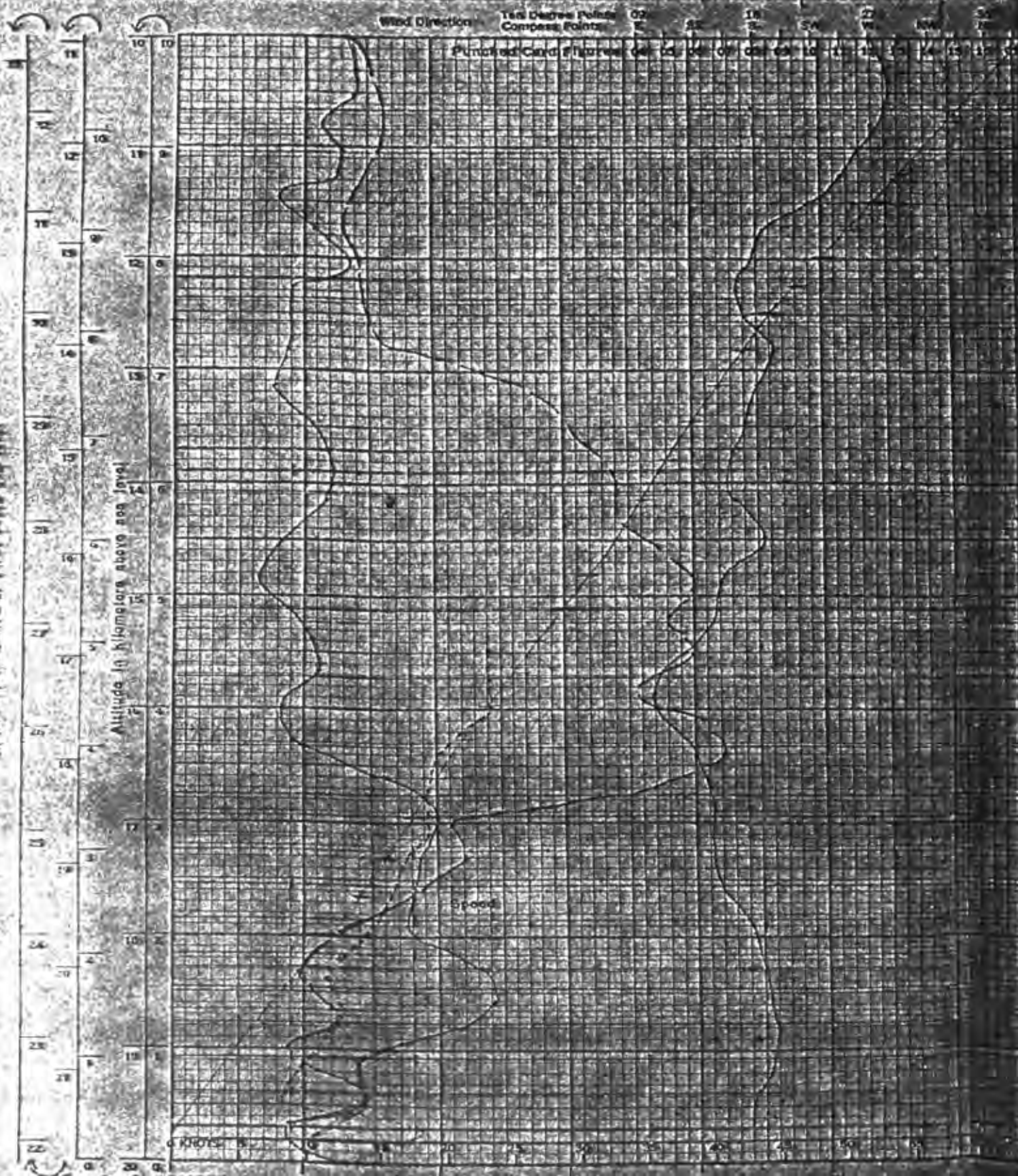
WINDS ALOFT

WBAN-20A

Ascension No. 2

STANDARD-LEVEL DATA FOR TRANSCRIPTION TO FO

Altitude (Km.)	Sfc.	0.5	1.0	1.5	2.0	2.5	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Direction (16 Pts.)	05	07	07	08	07	[illegible]	[illegible]	[illegible]	07	07	08	08	12	[illegible]	[illegible]	[illegible]	13	13	13	13	17	15	06	16	09	04	01	[illegible]		
Speed (M. P. S.)	05	01	08	12	09	10	10	04	04	06	04	04	06	07	08	01	12	17	20	19	11	06	04	06	06	07	10	12		

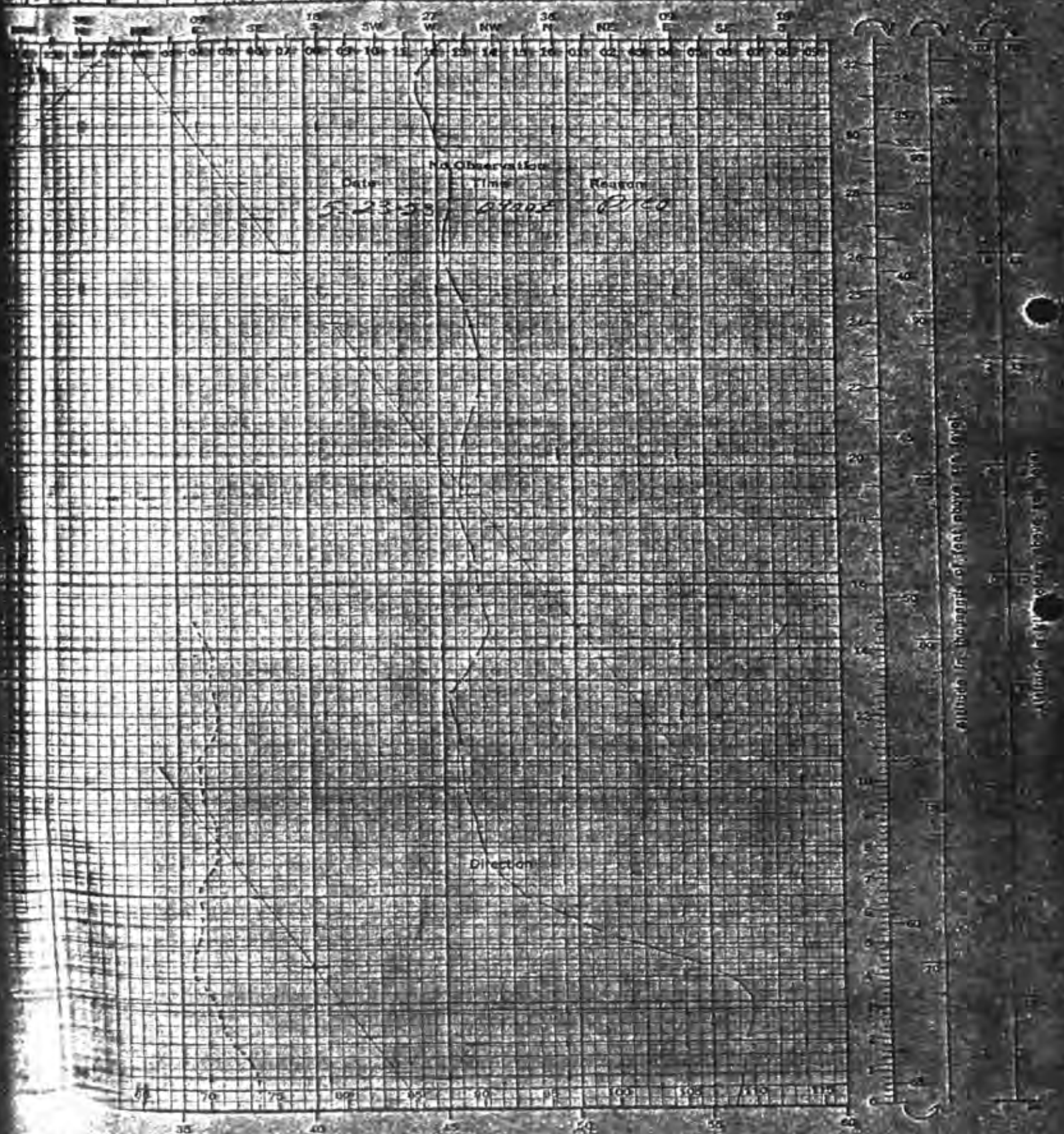


LOFT GRAPH
BAN-20A
Name No. 545

Release Date and Time	Year	Month	Day	Time
90th Mer.	[illegible]	[illegible]	[illegible]	[illegible]
G.C.T.	[illegible]	[illegible]	[illegible]	[illegible]

TION TO PUNCHED CARDS

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
4	04																										
0	12																										



Prepared by _____ Verified by _____

6.8	33	78	22,185	14,130	24290			1160		82	120	78
7.6	34	79	22,470	14,310		[illegible]	[illegible]					79
8.1	35	80	22,750	14,490		[illegible]	[illegible]					80
7.8	36	81	23,040	14,670								81
7.1	37	82	23,320	14,850								82
6.5	38	83	23,600	15,030								83
7.2	39	84	23,880	15,210								84
7.3	40	85	24,160	15,390								85
7.9	41	86	24,440	15,570								86
11.8	42	87	24,730	15,750								87
14.9	43	88	25,010	15,930								88
15.8	44	89	25,300	16,110								89
17.0	45	90	25,580	16,290								90

NOTES

H	dd	ff	H	dd	ff	H	dd	ff	H	dd	ff	H	dd	ff	H	dd	ff
	27	14		19	14	4	19	22		18	24	6	18	20		17	12
	10	11	6	15	09	8	18	08	6	16	12		17	09		27	12
	28	33	0	02	10	5	13	09	0	08	13	5	09	18	0	09	23

dd = Wind direction in tens of degrees. ff = Wind speed in knots.

SON TIME-ALTITUDE DATA

35	40	45	50	55	60	65	70	75	80	85	90	95	100
	742		668		660		532		[illegible]		[illegible]		[illegible]
	270.0		360		447		[illegible]						
	06110		15 60		13 [illegible]		[illegible]						

[illegible]	145.9	150	155	160	165	170	175	180	185	190	195	200	[illegible]
6	60	27											
00	90.60	24530											
25	6400	9720											

Observer [illegible signature] Recorder [illegible signature]

STATION SAN ANTONIO, TEXAS
Mon

LAT 29° 32' N LONG 98° 28' W

WB Form 1110A
UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
WINDS ALOFT COMPUTATION SHEET
(LAND STATION FORM)
WBAN-20

Ascension No: 547 *Method of Obs—Nation

Minute	Altitude: 100 gram balloon (meters)	Altitude: 30 gram balloon (meters)	Altitude: Other (feet) (meters)	Elevation angle °	Azimuth angle °	Distance from observation point (meters)	Slant range RAWIN (yards)	Wind dir (360°—N clockwise etc.)	Wind speed m.p.h. or k.n.	Minute	Altitude: 100 gram balloon (meters)	Altitude: 30 gram balloon (meters)	Altitude: Other (feet)
Sfc.								170		Sfc.			
1	330	216	510	33.7	171.7	460		171	7.1	1	46	13,075	9,340
2	670	414	1,630	37.5	174.7	840		172	7.4	2	47	13,375	9,560
3	980	612	2,730	35.7	172.4	1340		170	10.1	3	48	13,675	9,720
4	1,285	801	3,760	29.2	169.2	1960		172	13.1	4	49	13,975	9,910
5	1,585	990	4,790	27.5	168.9	2260		182	11.2	5	50	14,275	10,090
6	1,880	1,170	5,720	26.9	167.4	2580		171	9.2	6	51	14,570	10,270
7	2,170	1,350	6,650	26.4	171.2	2930		152	9.1	7	52	14,860	10,450
8	2,455	1,530	7,580	24.3	171.6	3330		148	9.3	8	53	15,145	10,630
9	2,740	1,710	8,500	30.2	170.9	4030		141	10.0	9	54	15,425	10,810
10	3,020	1,890	9,410	30.6	167.2	5340		128	7.0	10	55	15,705	10,990
11	3,300	2,070	10,340	30.7	165.7	5860		125	4.6	11	56	15,985	11,170
12	3,580	2,250	11,300	33.5	168.9	5740		100	0.7	12	57	16,260	11,360
13	3,855	2,430	12,190	34.1	174.1	5280		191	2.6	13	58	16,545	11,530
14	4,130	2,610	13,120	35.4	178.5	6170		185	5.3	14	59	16,825	11,710
15	4,405	2,790	14,060	35.6	180.6	6310		199	4.8	15	60	17,105	11,890
16	4,675	2,970	14,950	36.4	179.8	6720		183	3.9	16	61	17,385	12,070
17	4,945	3,150	15,860	37.2	178.4	6920		184	4.2	17	62	17,670	12,250
18	5,215	3,330	16,800	38.0	177.7	7160		162	5.9	18	63	17,950	12,430
19	5,485	3,510	17,730	38.1	178.0	7620		159	6.6	19	64	18,235	12,610
20	5,755	3,690	18,660	38.1	179.0	7800		171	5.2	20	65	18,515	12,790
21	6,025	3,870	19,610	38.3	180.0	8240		180	4.0	21	66	18,795	12,970
22	6,295	4,050	20,540	38.7	180.8	8330		193	4.4	22	67	19,080	13,150
23	6,565	4,230	21,480	40.1	179.0	8460		172	4.3	23	68	19,360	13,330
24	6,835	4,410	22,500	40.2	181.0	8570		167	4.4	24	69	19,645	13,510
25	7,105	4,590	23,490	40.2	182.6	9210		178	8.5	25	70	19,925	13,690
26	7,375	4,770	24,460	39.8	182.9	9600		186	5.9	26	71	20,210	13,870
27	7,645	4,950	25,420	40.1	183.8	9840		221	4.0	27	72	20,490	14,050
28	7,915	5,130	26,410	40.5	182.2	9950		246	6.2	28	73	20,775	14,230
29	8,185	5,310	27,360	41.2	182.2	9970		180	4.2	29	74	21,055	14,410
30	8,455	5,490	28,300	42.2	182.7	9900		219	6.1	30	75	21,340	14,590
31	8,730	5,670	29,260	43.4	181.9	9740		208	7.3	31	76	21,620	14,770
32	9,005	5,850	30,210	44.9	181.2	9550		282	7.0	32	77	21,905	14,950
33	9,285	6,030	31,180	45.2	178.5	9500		273	8.2	33	78	22,185	15,130
34	9,565	6,210	32,180	46.1	179.1	9510		258	7.5	34	79	22,470	15,310
35	9,850	6,390	33,210	47.2	179.9	9700		267	9.1	35	80	22,750	15,490
36	10,135	6,570	34,240	47.3	180.8	9760		274	7.8	36	81	23,040	15,670
37	10,420	6,750	35,260	48.8	181.4	9730		262	7.1	37	82	23,320	15,850
38	10,710	6,930	36,300	48.6	179.8	9640		277	6.2	38	83	23,605	16,030
39	11,005	7,110	37,360	50.3	179.7	9740		275	7.2	39	84	23,890	16,210
40	11,300	7,290	38,460	50.1	179.2	9750		283	7.3	40	85	24,170	16,390
41	11,595	7,470	39,530	51.1	179.3	9700		294	7.1	41	86	24,455	16,570
42	11,890	7,650	40,600	52.1	180.1	9690		300	7.4	42	87	24,740	16,750
43	12,185	7,830	41,690	53.5	179.2	9560		293	7.4	43	88	25,020	16,930
44	12,480	8,010	42,840	54.6	179.0	9500		290	15.8	44	89	25,300	17,110
45	12,775	8,190	43,700	54.1	176.2	9500		288	17.0	45	90	25,580	17,290

Termination owing to Target

Weight of balloon 500 grams
Weight of lighting device grams
Weight of target or transmitter grams
Free lift grams
Total weight grams

Color of balloon
Type of Target or transmitter

NOTES

CODED DATA																					
			99	DAT	00	15	99	17	10	99	17	12	99	17	14	99	19	14	99	19	
99	15	18	99	14	18	00	14	19	99	13	10	99	10	11	99	15	04			29	
99	26	16	99	28	14	99	29	31	00	30	37	99	28	33	00	02	10	99	13		
99	08	23																			

(1) = Standard level indicator (2) = Winds direction to nearest degree

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU

WINDS ALOFT COMPUTATION SHEET

(LAND STATION FORM)
WBAN-20

Release Date and Time				
	Year	Month	Day	Time
GCT				
LCT				

Name of observation _____ Elevation of observation point above MSL _____ (feet) (meters)

Minute	Wind direction (180°=N, 090°=E, etc.)	Wind speed m.p.h.	Minute	Minute	Altitude (100-gram balloon) (meters)	Altitude (30-gram balloon) (meters)	Altitude Other (feet) (meters)	Elevation angle	Azimuth angle	Distance from observation time (meters)	Shear (wind from 180°) (m.p.h.)	Wind direction (180°=N, 090°=E, etc.)	Wind speed m.p.h.	Minute
	170	5.4	SFC											
1	171	7.1	1	40	13,075	8,370	14010			10300		26	12.0	46
2	164	7.3	2	42	13,375	8,550	14250			10500		263	12.1	47
3	190	10.1	3	43	13,675	8,730	14490			10700		265	12.2	48
4	184	13.1	4	49	13,975	8,910	14760			10900		267	12.3	49
5	182	11.2	5	50	14,275	9,090	15240			11200		269	12.4	50
6	171	9.0	6	51	14,570	9,270	15570			11400		265	12.2	51
7	163	9	7	52	14,860	9,450	15880			11650		275	12.7	52
8	142	9.3	8	53	15,145	9,630	16180			11900		280	12.9	53
9	141	10.0	9	54	15,425	9,810	16490			12200		280	12.9	54
10	132	8.0	10	55	15,703	9,990	16800			12400		271	12.5	55
11	123	6.0	11	56	15,935	10,170	17180			12600		282	13.0	56
12	104	4.2	12	57	16,263	10,350	17430			12850		270	12.5	57
13	107	5.6	13	58	16,545	10,530	17790			13100		271	12.5	58
14	135	5.3	14	59	16,825	10,710	18090			13300		25	11.7	59
15	149	4.5	15	60	17,105	10,890	18410			13600		107	6.0	60
16	153	3.3	16	61	17,385	11,070	18770			13850		120	4.9	61
17	184	4.2	17	62	17,670	11,250	19070			14050		135	7.2	62
18	162	5.1	18	63	17,950	11,430	19440			14300		153	9.4	63
19	159	6.0	19	64	18,235	11,610	19760			14600		127	7.2	64
20	141	5.5	20	65	18,515	11,790	20040			14850		175	9.2	65
21	180	4.0	21	66	18,795	11,970	20340			15150		109	6.2	66
22	193	4.4	22	67	19,080	12,150	20700			15400		96	5.3	67
23	172	4.5	23	68	19,360	12,330	21030			15650		82	4.3	68
24	167	4.6	24	69	19,645	12,510	21350			16050		34	2.2	69
25	178	6.8	25	70	19,925	12,690	21680			16250		26	2.5	70
26	186	13.4	26	71	20,210	12,870	22000			15200		93	7.9	71
27	321	4.0	27	72	20,490	13,050	22330			16750		66	6.4	72
28	346	6.3	28	73	20,775	13,230	22660			14000		113	9.0	73
29	360	6.5	29	74	21,055	13,410	22990			13600		80	9.5	74
30	271	6.7	30	75	21,340	13,590	23360			13100		89	10.4	75
31	264	7.0	31	76	21,620	13,770	23650			12500		99	11.7	76
32	262	7.0	32	77	21,905	13,950	23980			11850		95	12.0	77
33	273	6.8	33	78	22,185	14,130	24290			11150		82	12.0	78
34	255	7.6	34	79	22,470	14,310								79
35	262	8.1	35	80	22,750	14,490								80
36	274	7.8	36	81	23,040	14,670								81
37	282	7.1	37	82	23,320	14,850								82
38	277	6.5	38	83	23,600	15,030								83
39	275	7.2	39	84	23,880	15,210								84
40	283	7.3	40	85	24,160	15,390								85
41	294	7.9	41	86	24,440	15,570								86
42	300	11.0	42	87	24,730	15,750								87
43	299	14.7	43	88	25,010	15,930								88
44	290	15.8	44	89	25,300	16,110								89
45	288	17.0	45	90	25,580	16,290								90

NOTES:

1	12	2	17	14	4	19	14	6	19	22	8	18	24	10	18	20	12	17	12
13	10	14	10	11	16	15	09	18	18	08	20	16	42	22	17	09	24	27	12
25	37	5	28	33	0	02	10	5	13	09	0	08	13	5	05	18	0	09	23

33	9,285	6,030	9760	45.7	176.5	9500		270	MX	33	28	22,180	14,480		
34	9,565	6,210	10100	46.1	177.1	9510		250	7.6	34	29	22,370	14,310		
35	9,850	6,390	10450	47.2	181.9	9700		260	8.1	35	30	22,560	14,490		
36	10,135	6,570	10780	47.9	184.8	9760		274	7.8	36	31	23,040	14,670		
37	10,420	6,750	11100	48.2	187.4	9730		282	7.1	37	32	23,820	14,860		
38	10,710	6,930	11470	49.8	189.8	9690		297	6.8	38	33	23,900	15,050		
39	11,005	7,110	11770	50.3	191.9	9790		275	7.2	39	34	23,850	15,240		
40	11,300	7,290	12160	50.1	194.5	9720		283	7.3	40	35	24,160	15,300		
41	11,595	7,470	12450	50.1	195.8	9700		294	7.7	41	36	24,440	15,570		
42	11,890	7,650	12760	51.8	200.1	9690		300	11.6	42	37	24,730	15,750		
43	12,185	7,830	13090	53.8	205.2	9760		299	14.9	43	38	25,010	15,930		
44	12,480	8,010	13440	54.6	211.0	9750		290	15.8	44	39	25,300	16,110		
45	12,775	8,190	13760	54.1	216.3	9900		288	17.0	45	40	25,580	16,290		

Termination owing to: Burst

Weight of balloon: 300 grams
Weight of lighting device: _____ grams
Weight of target or transmitter: _____ grams
Free lift: _____ grams
Total weight: _____ grams

Color of balloon: _____
Type of target or transmitter: _____

NOTES: _____

CODED DATA																	
	H	dd	ff	H	dd	ff	H	dd	ff	H	dd	ff	H	dd	ff	H	dd	ff
		SAT	15	0	17	10	1	17	12	2	17	14	3	19	14	4	19	
	5	15	18	6	14	18	7	14	19	8	13	10	9	10	11	10	15	09
	5	20	16	6	28	14	5	29	31	0	30	37	5	28	33	0	02	10
	1	09	23															

H = Standard level indicator; dd = Wind direction in tens of degrees; ff = Wind speed in knots

RASON TIME-ALTITUDE DATA

Contact	**	5	10	15	20	25	30	35	40	45	50				
Pressure					718		618		714		618				
Altitude (m. s. l.) or pressure ratio					10450		12150		10080						
Time					0235		0500		0610						

Contact	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175
Pressure		318		354		161		510		510					
Altitude (m. s. l.) or pressure ratio		10000		11600		13700		15800		15800					
Time		0500		0		0		5		5					

*Indicate "radio, radar, or pilot" **Surface ***Terminated

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Observer: _____

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