INSTRUCTIONS FOR WBAN-

1. **General.** Prepare with a typewriter WBAN–10D as follows:
   (1) At land stations the form will be prepared annually to describe the status of the station on the 31st day of December. A revised form will be prepared whenever necessary to describe the status of the station on the last day of the month in which there is a change in the data contained in the current form. At first-order stations, the form will be prepared at the station. The form will be prepared for CAA stations by the regional or overseas supervisory office. For other second-order stations, and Coast Guard stations whose reports are transmitted as separate reports on Services A or C, the form will be prepared by the supervising first-order station.
   (2) On ocean-station vessels, the form will be prepared at the end of each patrol.

1.1 An original and as many carbon copies as needed will be prepared and distributed as follows:
   (1) At land stations the original to be bound as the frontispiece for the original WBAN–10 (or 610–7, etc., if WBAN–10's are not used) for the corresponding month.
      (*a*) The first and second carbon copies to the regional or overseas supervisory office (the first carbon to be forwarded on to the Central Office).
      (*b*) One copy for each set of records (610–7, 610–10, 612–32, 612–33, WBAN–10, or WBAN–11) which is not accompanied by the original copy.
      (*c*) One copy to be retained at the station preparing the form for reference when preparing new WBAN–10D forms, etc.
   (2) At ocean stations the original will be bound as the frontispiece for the observational records for the patrol.

2. **Entries.** Omit entries not applicable to the station. Complete all other entries in the manner specified by the captions on the form and the following:

2.1 **Identification of Station.**
   (1) Name of Station. At land stations, enter the name of station, and at airport stations also enter the name of the airport. On shipboard, enter the name of the ship, and the name of the assigned location pertaining to the patrol.
   (2) Period of Record. Enter the month and year of record.
   (3) Latitude and Longitude. Enter the location of the station in degrees and minutes to the nearest minute, which, on shipboard, is the assigned location pertaining to the patrol.
   (4) Local Standard Time Meridian. At land stations, enter the meridian of local standard time (LST) to degrees; e. g., 75 at stations in the Eastern Standard Time zone. Omit this entry on ocean-station vessels.
   (5) Greenwich Civil Time (GCT). At land stations, enter the number of hours by which local standard time differs from GCT. Delete "add" or "subtract" as appropriate to convert LST to GCT. Omit these data at shipboard stations.

2.2 **Times (LST) of Observations.** Enter the usual time of taking the observations listed. At stations where an additional datum observed at a routine time is entered on Form 1001B, WBAN–10A or B, or WBAN–11A or B and the time of observation is not specified on the form, identify the datum and enter the usual time of observation in the additional space provided.

2.3 **Instrumental Equipment and Exposures.**
   (1) Barometer Number. Enter the serial number of the barometer designated at the station barometer.
   (2) Elevation Data. At land stations, enter these data as determined from the appropriate entries on Form 450–1 (see Appendix I to Circular N Addendum); on shipboard the following instructions apply:
      (*a*) Ground Elevation (H). On shipboard enter zero.
      (*b*) Elevation of Barometer (H_z). On shipboard enter the average height of the barometer above the water (the height of the instrument above the load line) to the nearest foot.
      (*c*) Station Elevation (H_p, formerly H_b). On shipboard enter the same value as the elevation of barometer (H_z).
      (*d*) Climatological Station Elevation (H_{pc}, formerly H_{sc}). On shipboard enter a dash.
      (*e*) Field Elevation (H_a, formerly H_f). On shipboard enter zero.
      (*f*) Height of the Eight-Foot Plane (H_8). On shipboard enter 8.
   (3) Sum of Corrections. Transcribe the sum of corrections from Form 455–10 (formerly 1059) for the station barometer (mercurial). On shipboard, enter the applied correction in use for determining station pressure from the ship's barometer.

2.4 **Entries in Columns.** When a station is equipped with two or more instruments of the same kind, enter the following data for the instrument most frequently used in obtaining data for record purposes. Use the additional lines for data relating to the identification, location, and exposure, as appropriate, of other instruments, such as telethermometers, wind systems, etc.
   (1) Instrument. Enter a check mark (V) preceding the names of instruments installed at the station.
   (2) Type. Using the terminology of the stock catalog or manufacturer's instruction manual, describe the instrument sufficiently to distinguish it from other instruments used for the same purpose.
   (3) Height Above Ground. At land stations, enter, in feet, the height of the instrument above the ground. Measure these heights as the distance from the instrument to the ground directly below the instrument, except that when the instrument is located over a building, measure the height as the vertical distance from the instrument to the average level of the ground surrounding the building. On shipboard, enter the average height of the instrument above sea level (the height of the instrument above the loadline of the ship).
   (4) Location. Enter the location of the instrument with respect to its environment; e. g., on ground, on roof, on mainmast, etc.
   (5) Nearest Obstruction. Describe briefly the type or nature of the nearest obstruction, if any, that has an adverse effect upon the exposure of the instrument; e. g., buildings, trees, heat exchanger, other instruments on masts or yardarms, etc. (See instrument exposure instructions for obstructions criteria.)
   (6) Distance and Direction. Enter the relative distance and direction from the instrument to the nearest obstruction as identified in (5); e. g., "500′ N" to indicate a building 500 feet to the north of the instrument.
   (7) Height of Obstruction Above Instrument. Enter the approximate height of the top of the obstruction above the instrument in feet. When the bottom of the obstruction is closer to the instrument than to the ground, also indicate the approximate height of the instrument above the bottom of the obstruction in feet.
   (8) Date Installed Present Exposure. Enter the date on which the instrument was installed with its present location and exposure.

2.5 **Ceilometer and Ceiling Light.** Enter ceilometer and ceiling light baseline lengths to the nearest foot, in their respective spaces.

2.6 **Radar, River Gage, and Transmissometer.** Enter complete information in the spaces provided.

2.7 **Remarks.**
   (1) At land stations, enter the complete address of the station on the form for December, and for the first month of record at a new station or following the relocation of a station.
   (2) In addition to the "nearest obstruction" data in par. 2.4 (5–7) identify in "Remarks" other obstructions having an adverse effect upon the exposure of an instrument; identify the instrument; indicate the height of the obstruction above the instrument, and the distance and direction of the obstruction from the instrument.
   (3) Enter any pertinent information not otherwise provided for on WBAN–10D, such as explanations of changes pertaining to instrument exposure, station exposure, observational programs at the station, etc.

2.8 **Description of Station Exposure.** At land stations describe the surrounding terrain and its relation to the site of the station. Indicate whether the surrounding country is generally level, rolling, hilly, or mountainous. Give the elevation (MSL) and location of hills or mountains; the location of any bodies of water; and describe any pronounced topographical influence on the weather such as foehn effect, air-drainage effects, upslope winds, etc. Indicate the location, size, and height of nearby buildings, and the locations of surfaced runways, if any. Indicate nature of ground surface over which thermometers and rain gages are exposed and slope of terrain when these instruments are located in a shelter or support on the ground. If more space is needed, use additional sheets of white paper.

2.9 **Prepared by.** The name and title of the person responsible for preparing the form will be typed in the space provided and the original signed by him.

U. S. GOVERNMENT PRINTING OFFICE : 1955—O-351745

INSTRUCTIONS FOR PREPARATION OF WB FORM 500-1

General

Use elite typewriter if available. Prepare as completely as possible. Abbreviations may be used where meanings are obvious. Five (5) copies will be prepared: Original and one (1) copy for the Central Office; one (1) for the WRPC; one (1) for the appropriate Regional Office; and one (1) for station preparing the forms. The first form prepared for a station will be checked "ORIGINAL." If practicable include with the original rendition a map of the area on which the present and all previous locations of the station are indicated. Subsequent renditions to be submitted on December 1 of each year will be indicated as supplements and need only include data for changes since last report, such as: changes in type of station, consolidation of city and airport offices, relocation of one or more instruments, etc. If no changes have occurred during the year, the heading should be filled out and "no changes" written on the first line under (a) and (b). Forward all copies except the one for the station to the Regional Office for review and distribution.

Items which do not apply should be left blank. For example, at a station not equipped with a weighing rain gage, column (q) should be left blank. If data are not available a dash should be entered; for instance, if the station has a weighing rain gage but the elevation above the ground is not known, enter a dash in column (q). Indicate doubtful information by a query or footnote.

Entries on form 500-1:

Entries in the heading are self-explanatory. These entries will be completely filled in each time a form is submitted. Number supplements consecutively beginning with one (1).

(a) "Number of Location." Enter "1st" for the first location, "2nd" for the next, etc. Where a station has been preceded by a cooperative station, the cooperative station history should precede the history of the other station. Use additional sheets if necessary.

(b) "Location." Enter exact location using street and number where appropriate as, "224 E 4th Street." For airports indicate name of airport and direction and airline distance from the Post Office. If the building has a name, enter that name as well as the street address.

(c) "Type of Station." Use symbols for stations thus: WBO or WBAS for first order; CAA for Civil Aeronautics Administration; SAWRS for Supplementary aeronautical weather reporting; S, A, or SA for second order paid synoptic, aviation, or combined synoptic and aviation; CG for Coast Guard, AF for Air Force, Coop for cooperative, etc.

(d) and (e) "At this Location From - To." Enter dates using month, day, and year if possible thus: "1-7-17," "5-1-49."

(f) "Airline Distance and Direction from Previous Location." Show as "2-1/4 miles SSE" or "1000 Ft. NNW."

(g) and (h) "Latitude" and Longitude." If coordinates to tenths of a minute can readily be determined, make entries thus: "40°20.4'," "75°58.8'." If not enter them to the nearest minute as "40°20'," "75°59'."

(i) "Ground Elevation (H)." Enter in whole feet.

(j) and (k) "Assigned Station Elevation (H_b)" and "Actual Elevation, (H_z)." H_b and H_z will be entered to two decimal places if available.

(l) to (r) "Elevation of Instruments." Enter in whole feet.

(s) and (t) These columns will be used for other instruments. If used, the instruments should be entered in the headings of the columns under which data on them are reported.

(u) "Remarks." Enter pertinent data such as reasons for moves, dates of beginning and/or ending of observational programs such as aviation observations, pibals, etc., effects of buildings, terrain, etc., or any other remarks of interest concerning the station programs, station location or location of instruments.

Form WBAN–10 D
(Revised 7–55)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

SURFACE WEATHER OBSERVATIONS

Meteorological record at AMUNDSEN-SCOTT SOUTH POLE STATION, ANTARCTICA for OCTOBER 1957
(Airport stations include name of field) (Date, month, and year)

Latitude 90 °S '; Longitude ° ' . Local standard time 180 th mer. (add or subtract) 12 hours to convert to GCT.

Times (LST) of Taking Observations of

Soil temperature _____ Thickness of ice on water _____ River stage _____ Evaporation _____

Soil moisture _____ Frozen ground layer _____ Climatological _____
(Other—specify)

Instrumental Equipment and Exposures

Number of station barometer 219 Ground elevation (H) *9186 feet MSL. *9186 (Date) Barometer elevation (H_z) _____ feet MSL. 1/7/57 (Date)

Sum of corrections +0.028 in. Station elevation (H_p) _____ feet MSL. _____ (Date) Field elevation (H_s) _____ feet MSL. _____ (Date)

Climatological station elevation (H_{pc}) _____ feet MSL. _____ (Date) Height of 8-foot plane (H_8) _____ feet MSL. _____ (Date)

Instrument	Type	Height above ground or sea (feet)	Location	Nearest obstruction	Distance and direction to obstruction	Height of obst. above instrument	Date installed present exposure
( ) Direct reading wind equipment							
X ( ) Other wind equipment	Aerovane #227	33	main mast	camp	250' S	below	3/6/57
X ( ) Wind recorder (not triple register)	F006, F102A	32	" "	"	" "	"	3/6/57
X ( ) Maximum	Aerovane mod 141-4						3/6/57
X ( ) Maximum and minimum	Thermohm	5	Thermoscreen	"	" "	7'	3/6/57
X ( ) Psychrometer ( ) Dew cell	Telucl	5	"	"	" "	"	1/11/57
( ) Infra red hygrometer							
( ) Telepsychrometer ( ) Telepsychrograph							
X ( ) Thermograph	5 day	4½	"	"	" "	"	10/20/57
X ( ) Remote reading thermometers (5)	L&N 100ohm Cu	**	**	"	" "	**	4/1&2/57
X ( ) 8" precip gage	homemade	30	main mast	-	-	-	7/1/57
X ( ) 8-inch standard raingage	not shielded	3½	snow	camp	300' S	-	7/6/57
( ) Weighing raingage							
( ) Tipping bucket raingage							
( )							
X ( ) Barograph, 4 day	Bendix-Friez	*9186msl					1/9/57
X ( ) Precision aneroid	Kollsman	*9186msl					1/9/57
X ( ) Altimeter setting indicator	Kollsman	*9186msl					1/9/57
X ( ) Snow albedo pyrheliometer	Eppley	4'	over snow	main mast	75' S	25'	10/22/57
( ) Triple register (X) Multiple recorder	Esterline Angus						1/28/57
X ( ) Solar radiation	Eppley pyrhelio.	5'	over snow	main mast	75' E	25'	9/10/57
X ( ) Pilot balloon				astronomy bldg			6/22/57
X ( ) Rawinsonde	GMD1A &AMT4A						3/27/57
X ( ) Net & Hamis. Radiometers	B & W.	4'	over snow	main mast	75' E	25'	5/7/57

( ) Ceilometer: Type _____, baseline _____, date installed _____ ( ) Ceiling light: Type DCE16, baseline 500' 700', date installed April 1957

( ) Radar: Type _____, wavelength _____, antenna size _____ Owned by _____ date installed _____

( ) River gage: River _____, flood stage (feet) _____, elevation of zero of gage (feet) _____, date installed _____

( ) Transmissometer: Baseline (feet) _____, date installed _____

Remarks *Conversion to feet of calculated altitude of 2800 meters. ** Located: #1 at -10 meters; #2 on snow surface; #3 in thermoscreen; #5 at +5 meters; #6 at +10 meters; all but #3 located near or on the wind mast; #2, #5 and #6 provided with temporary shielding; none aspirated.

Description of station exposure Located on the south polar plateau at the geographical south pole and at a calculated altitude of 2800 meters. The station is approximately 300 miles from the head of the Beardmore Glacier and the peaks of the Queen Maud Mtns although isolated nunataks from this range are believed to be within 150 miles of the Pole along the 120°W longitude. In other directions the plateau stretches without any known prominent featur

WBAN–10 D

WBAN 10 D (cont) Description of Station Exposure:

being evident for hundreds of miles and in certain directions (40°E thru 145°E longitude) for a thousand miles. Variations in elevation are known to exist over the plateau but th slope is extremely gentle and barely apparent. In the direction towards the sector from 40°E thru 145°E, elevations possibly as high as 4300 meters exist. From the weather experienced at this station to date, it appears as though the highest elevations will be found from 90°E thru 110°E and between 80°S and 85°S latitude. In a direction towards the Horlick mountains (towards 90°W longitude) it appears as though the general elevatior must decrease rather rapidly while towards the 0° longitude the elevations must also decrease but much more slowly. A very pronounced prevailing surface wind exists at this station with surface wind directions in the sector from 0° longitude clockwise through 110°E longitude accounting for 95% of the hourly wind directions recorded from January through October 1957. Winds from the WSW (from about 100°W through 130°W) were never recorded during this period of record (comprising 6242 hours), and surface wind directior in the larger sector from 70°W longitude through 170°W longitude occurred less than ½ of one per cent of the hours. This provides an ideal climate for the exposure of instruments to keep them free of camp smoke pollution. As originally exposed, the therm screen is affected by winds from about SE through S or, from the period of record, about 3% of the hours. The radiation instruments are affected by winds from SSE through SSW or less than 1% of the hours. The location of the main wind mast results in its being affected by winds from the same sector although to a slightly lesser amount than the radiation instruments. Sastrugi are oriented about from 040°E -050°E with occasional drift in summer (January)from the NW through N (from 050°W through 010°E) and occasional winter drift from the east (from 090°E).

E. Flowers (MIC)

[redacted]

WB Form 500-1

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

RENDITION: ( ) Original;
(X) Supplement No. ____

OFFICE PREPARING FORM Ben W. Harlin, MIC

STATION AMUNDSEN-SCOTT SOUTH POLE STATION, ANTARCTICA COUNTY _____ STATE _____ INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED 10-1-61

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_b)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	In mess Bldg.	First order	1/7/57	Present		90°S		9186'		9186'
	Remarks: The first barometer was #219 and is still used as the second barometer. On 2/21/61 a new barometer, #530, was installed alongside the old one. After the necessary comparisons were made this new barometer became the official one 3/16/61. A correction of +0.036 inches must be added to the old barometer to make it read the same as the new one.									

ELEVATION ABOVE GROUND									REMARKS
WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER	RAIN GAGES: TIPPING BUCKET	RAIN GAGES: WEIGHING	RAIN GAGES: 8 INCH			(Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
30.5'	Min 5.5'	5.5'				3'			These figures as of Jan. 26, 1961. Since the snow surface is constantly changing these figure will change. At the end of each month the correct figures will be entered on the monthly weather summary.

REMARKS CONTINUED:

AMUNDSEN-SCOTT, STATION INSTRUMENTATION

Instrument Type	Height	From	To	Remarks
		Temperature		
Thermograph		11-23-58	1-11-60	Dry bulb temperatures taken from aspirated thermohm at 4.5 ft., 1-11-60; 3.0 ft., 1-1-61; 5.3 ft., 1-14-61.
Min. Thermometer, Liquid in glass	5 ft. above sfc.	11-23-58	1-11-60	Maximum and Minimum temperatures taken from aspirated thermohms at 4.5 ft., beginning 1-11-60; 3.0 ft., 1-1-61; 5.3 ft., 1-14-61.
Max. Thermometer, Liquid in glass	5 ft. above sfc.	11-23-58	1-11-60	3.0 ft., 1-1-61; 5.3 ft., 1-14-61.
Telepsychrograph, L&N Wheatstone Bridge Recorder with 6 thermohms	(See Remarks)	4- 2-57		Height of Thermohms: -9.4' (Point #4), -4.5' (Point #1), 4.5' (Point #3), 28.7' (Point #6), 45.1' (Point #2), Thermohm (Point #5) installed and aspirated 2-9-60 at 12.3' above surface. Beginning 3-17-60, #4 point is snow surface temperature. Sub-surface thermohms located in drill hole at depths of -2.0, -4.0, -6.0, -7.0, and -8.0 meters. 10-1-60 snow surface temperature now #36 thermocouple located beneath Hemispheric Radiometer.
		Wind		
Aerovane (Wind Indicator)	9.3 meters above sfc.	12- -57		Located on 45 ft. steel mast.
Aerovane (Wind Recorder)		3- 6-57		
		Pressure		
Barograph, Bendix-Friez, 4-day	9186 ft. MSL	1- 9-57		
Barometer, Kollsman, Aneroid	9186 ft. MSL	1- 9-57		
Altimeter, setting indicator, Kollsman	9186 ft. MSL	1- 9-57		
		Solar Radiation		
Pyrheliometers:				Note: New Solar Radiation Instrument field established, effective 10-13-60.
Eppley, upfacing	5 ft. above sfc.	10-22-57	10-13-60	
Eppley, downfacing, snow albedo	4 ft. above sfc.	10-22-57	10-13-57	
Normal Incidence	3 ft. above sfc.	1957	9-21-60	
Eppley, diffuse sky (shade ring)	4.9 ft. above sfc.	10- 4-60		
Eppley, upfacing	4.0 ft., 3.5 ft. above sfc.	10-13-60		Note: Spare Eppley pyrheliometer used interchangeably.
Eppley, downfacing	14.5 ft. above sfc.	10- 7-60		
Normal Incidence	4.2 ft. above sfc.	9-24-60		
Kipp Solarimeter	4 ft. above sfc.	9-21-60		
Net Radiometer, Beckman & Whitley	4 ft. above sfc.	5- 7-57	10-13-60	
Hemispheric Radiometer, Beckman & Whitley	4 ft. above sfc.	5- 7-57	10-13-60	
Schulze Net Radiometer (and minus 1.0 meter thermocouple)	2.5 ft. above sfc.	9-15-60		(Formerly Net Radiometer, Beckman & Whitley).
Hemispheric Radiometer and snow surface thermohm (winter), thermo-couple (summer)		10-13-60		
Illuminometers, upfacing and downfacing	4 ft. and 15 ft. above sfc.	1-19-59	10-13-60	
Illuminometer, downfacing		10-13-60		
		Miscellaneous		
Rain Gage, 8 in. standard shielded	3-1/2 ft. above sfc.	1-15-57		
Multiple Recorder, Esterline-Angus		1-26-57		
Ceiling Light K 100		11-29-58		Base line 500 ft.
Rawinsondes, GMD 1A, AMT 4A	15 ft. above met. office	3-27-57		
CO_2 Analyser		1- -59		NRL air-monitor unit transferred from Little America V station. Installed January 1959.
Sunshine Switch, photoelectric		1957		Continuous recording on Esterline-Angus recorder.

On 21 Feb. 1961 Barometer #530 installed alongside original Barometer #219. #530 Official Barometer from 16 Mar.'61 correction to #219 to read same as #530 is +0.036

WB Form 500-1

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

RENDITION: ( ) Original;
(X) Supplement No. ____

OFFICE PREPARING FORM Amundsen-Scott Sta.

STATION Amundsen-Scott COUNTY South Pole STATE Antarctica INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED Dec. 1, 1961

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_b)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	No change	First Order	1/7/57	Present		90deg.S	—			

ELEVATION ABOVE GROUND									REMARKS
WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER	RAIN GAGES					(Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
				TIPPING BUCKET	WEIGHING	8 INCH	(s)	(t)	
(l)	(m)	(n)	(o)	(p)	(q)	(r)			(u)
* See Monthly WBAN 10D for actual heights.									

REMARKS CONTINUED:

*Monthly height changes due to shifting snow surface.

WB Form 500-5

STATION INFORMATION

U. S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

A. STATION: Amundsen-Scott, South Pole Station, Antarctica — First order — U. S. Weather Bur.

B. RENDITION
1. Check one: (X) Complete rendition of 500-5. ( ) Supplement to complete rendition dated ....
2. Effective date: Dec. 1, 1961
3. Purpose of this rendition or supplement: requested by POP

C. SURFACE OBSERVATIONS, CODED SYNOPTIC and 3-HOURLY
1. Reports at: 00,03,06,09,12,15,18,21 GCT.
2. Special ....

D. SURFACE OBSERVATIONS, AVIATION
1. Reports:
a. SAME AS SURFACE OBS. & ALSO Regularly WHEN REQUESTED. SPECIALS WHEN REQUESTED.
2. Elements reported: Ceiling and visual elements (X), sea level pressure ( ), temperature (X), dewpoint ( ), wind (X), altimeter setting (X), remarks (X). 700 mb. height.
3. Additive data:
e. Antarctic code manual used
Local standard time: GCT
X X X X X X X X
GMT X
00 Rs 12 Rs
X
SNOW X

G. OBSERVATIONAL DATA FORMS
WBAN 10A (X) WBAN 10B (X)

H. COMMUNICATIONS
1. Local: McMurdo , NAF (NGD) X via USN
4. On AF facsimile circuit? Yes ( ), No (X)
8. Location identifier letters NGD2 Index No. 89009

I. PART-TIME PERSONNEL (CERTIFICATED)
1. Paid: Number normally employed 0

J. MISCELLANEOUS
2. Date station opened 1/7/57 closed —
3. Date station became present type 1/7/57
4. First order station office hours 0000-2400
5. Location of office South Pole Station, in mess hall bldg.

K. REMARKS

L. PREPARED BY R. P. Mallory, Jr.
Title Supervising Met. Tech.
Station Amundsen-Scott Date prepared Dec. 1, 1961

WB Form 500-5

WB Form 500-1

FILE

UNI) STATES DEPARTMENT OF C :MERCE
WEATHER BUREAU

STATION HISTORY

STATION HISTORY

NWRC (Climat.Information Section) data extracted from original forms received from station

RENDITION: ( ) Original;
( ) Supplement No. ____

OFFICE PREPARING FORM

STATION Amundsen-Scott, Antarctica COUNTY STATE INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED 14 June 1963

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_b)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	Mess Hall Building	First Order	7 Jan.'57	1 Oct.'61		90° S		9186'*		9186'*

Station is located near geographic South Pole at an altitude of Approx. 9,186 feet (2800 meters). Situated on a snow plain approx. 300 miles from the head of Beardmore Glacier. There are possibly some isolated nunataks within 150 miles along the 120th mer. West. In other directions the polar plateau continues without any known landmarks for hundreds of miles, in the sector 40°E Long. through 145°E Long. there are no known landmarks for a thousand miles. Variations in elevation are known to exist, but the slope changes are hardly apparent. In the quadrant 40°E Long. through 145°E Long. the plateau is believed to approach an elevation of approx. 13,000 feet, but since the altitude change takes place over such a great horizontal distance the slope angle would hardly be visible.

*** ELEVATION ABOVE ~~GROUND~~ Snow**									REMARKS (Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER	RAIN GAGES ## TIPPING BUCKET	RAIN GAGES ## WEIGHING	RAIN GAGES ## 8 INCH	(s)	(t)	(u)
(l)	(m)	(n)	(o)	(p)	(q)	(r)			
33' 1	5.5' 8	5.5' 10				3.5' 8			Dates of Measurement of elevations made: Note: Prior to January 1959 observations were taken in 180th mer. time (LST).
30.5' 2	6.0' 9					3.0' 6			1 March 1957 — During 1959 LST became GCT. After
30.2' 3	5.5' 4					2.0' 6			2 December 1957 — December 1959 observations taken in
29.6' 4	4.6' 5					3.5' 11			3 December 1958 — GCT but LST reverted to 180th Mer.
29.1' 5	6.0'#					3.0' 12			4 February 1959 — time.
28.8' 6	5.0' 7								5 May 1959
									6 Unknown
									7 December 1960
									8 Installed January 1957
									9 Relocated November 1958
									10 September 1961
									11 Relocated July 1957
									12 Relocated January 1959

REMARKS CONTINUED:

Unshielded part of time (periods unknown)
Raised from 4.0' to 6.0' October 1959
* Conversion to feet from calculated altitude of 2800 meters
** Elevations constantly changing due to snow accumulation
*** Max. themometer installed 6 March 1957

WB Form 500-1

WB Form 500-1

A. O.

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

RENDITION: ( ) Original;
(X) Supplement No. ____

OFFICE PREPARING FORM AMUNDSEN-SCOTT STATION

STATION AMUNDSEN-SCOTT COUNTY SOUTH POLE STATE ANTARCTICA INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED AUGUST 1, 1963

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_b)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	NO CHANGE	WBO	1/7/57	PRESENT		90° S		9186	9186	9186

ELEVATION ABOVE ~~GROUND~~ SNOW SURFACE									REMARKS
WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER	RAIN GAGES: TIPPING BUCKET	RAIN GAGES: WEIGHING	RAIN GAGES: 8 INCH			(Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
1									
30'	#3-4	NONE	#NONE	-	-	-			NO CHANGES. MAXIMUM THERMOMETERS REMOVED FROM THERMOSCREENS UNKNOWN DATES.
* MINIMUM ONLY									
# ASPIRATED THERMOHMS									MONTHLY HEIGHTS CHANGE SLIGHTLY DUE TO SHIFTING SNOW SURFACES

REMARKS CONTINUED:

Form WBAN 10 D (9-60)

WB FORM 500-10
SECTION I

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

(WEATHER OBSERVATIONS)

Station *(Name, State; Airport, if any)*: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Type: WBO

Location *(Name of building, street, etc.)*: SOUTH(GRID)END OF MESS HALL BLDG

Latitude: 90 ( ) ° S

Longitude: - °

Prepared for close of: *(Month and year)* AUGUST 1, 1963

Local standard time *(in use at land stations)*: 180 th mer.

Hours to convert to GCT: Add ____ Subtract 12

Reason for rendition *(Check one or more)*

X	Annual rendition		Relocation of instrument(s)
	New station	X	Change, or
	Station relocation		Correction of data

1. TIME OF OBSERVATION *(other than aviation, 3- and 6-hourlies, radar and upper-air)*

		Local standard time
X	Soil temperature SNOW	0900
	Soil moisture	
	Thickness of ice on water	
	Frozen ground layer	
	River stage	
	Climatological	
	Evaporation	
	Other *(Specify)* -3.2,-4.8,-6.5 FT. thermisms Hourly	

2. ELEVATION AND DATE ESTABLISHED

Elevation	Feet *(MSL)*	Date
Ground (H)	9186	1/7/57
Field (H_a)		
Station (H_p)	9186	1/7/57
Barometer (H_z)	9186	1/7/57
Climatological Station (H_{pc})		

3. INSTRUMENTATION *(Location and exposure)*

	Instrument (X = in use, S = standby)	Type	Height above ~~ground~~ SNOW	FROM Location	Nearest obstruction	Distance and direction to obstruction	Height of obstruction above instrument	Date commissioned present exposure
X	Direct reading wind equipment	AEROVANE	30	MET OFFICE 250°N	RADOME	250°N	-	12/57
	Other wind equipment							
X	Wind recorder for direct reading equipment	AEROVANE						3/57
X	~~Extreme~~ and minimum thermometers	WEXSLER TOLUNE	4'	250°N	Steel mast	30°ENE	26'	11/58
S	Psychrometer SLING; Dew cell							
	Hygrothermometer; Infra red hygrometer							
	Telepsychrograph							
	Thermograph; Hygro-thermograph							
X	Remote reading thermometer	ASPIRATED THERMOMS*	250°N	RADOME	250°S	-		12/57
X	SUBSURFACE THERMOMS	CONSTANTAN	*	-	-	-	-	1/61
	8-inch raingage; Shielded							
	Weighing raingage; Shielded							
	Tipping bucket raingage; Shielded							
	AMOS							
X	Barograph 12 hour	BENDIX-FRIEZ	9186					1/9/57
X	Precision aneroid	KOLLSMAN	9186					1/9/57
X	Altimeter setting indicator	KOLLSMAN	9186					1/9/57
S	Sunshine switch		NOT IN OPERATION					
	Triple register; Multiple recorder							
	Solar radiation		TERMINATED 12/31/62					
	Pilot balloon							
X	Rawinsonde; Radiosonde	GMD1A	15'	ABOVE				3/27/57 1961

No. of station barometer 530 Sum of corrections +.025

	Instrument	Type	Baseline (ft.)	Date commissioned
	Ceilometer (1)			
	Ceilometer (2)			
X	Ceiling light C-H K100	NOT IN USE		
	Transmissometer (1)			
	Transmissometer (2)			

RADAR →	Type:	Owned by:	
	Wavelength	Antenna size	Date comm.
RIVER GAGE →	Type:	River:	
	Flood stage ft.	Elev. of zero of gage ft.	Date comm.

4. Remarks and description of station exposure *(Continue on separate 8" x 10 1/2" sheet, if necessary)* NEARLY FLAT PLAIN OF SNOW WITH GENTLE RISE TO GRID NORTH AND EAST. NO HILLS, ONLY SNOWDRIFTS CAUSED BY CONSTANT WIND. PREDOMINATE WIND IS NNE: E WINDS BRING FAIR WEATHER, WINDS FROM SW,W,NW BRING STORMY WEATHER. ICE CRYSTALS FROM CLEAR SKY FREQUENT PHENOMENA. CAMP STEAM ONLY SOURCE OF AIR POLLUTION BUT PREVAILING WIND MAKES THIS OF LITTLE CONSEQUENCE. DIRECTIONS ARE BASED ON GRID SYSTEM WITH E → 0 MERIDIAN. *THERMOM HEIGHTS - see attached sheet.

Prepared by *(Signature)*	Title	Station
HARRY R. SPOON	SUPERVISORY MET.TECH.	AMUNDSEN-SCOTT,SOUTH POLE,ANTARC*

USCOMM-WB-DC

WB FORM 500-10 (1-60) U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

R A O APPROVAL	
Station	AMUNDSEN-SCOTT STATION SOUTH POLE, ANTARCTICA
Prepared by (Name, title, station and date)	HARRY R. SPOHN SUP. MET. TECH.
Effective date	AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL	SECT IIB 2		SHALLOW THERMOHMS OF DEPTHS 5;10;15;25; 50cms became inoperative 12/1/62

Section IIA- AIR TEMPERATURE AND HUMIDITY MEASURING AND RECORDING EQUIPMENT depths below surface

1. Shelters (Repeat data in items a through c for each shelter)

a. Indicate for each type (large, medium, small, other) the direction and distance from office

	Medium	Medium	Small	Hygrothermometer, etc. (Spec)
	355 deg. 250'	360 deg. 245'		ASPIRATED THERMOHMS ON TOWER 11 deg. 270' FROM MET OFFICE

b. Height of floor (in feet) for each type HEIGHTS:42.4;27.9;3.8FT

Above Snow →	about 4'	about 4'		
Above roof →				

c. Is shelter lighted? (Check one box for each type)

☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No

Instruments

d. Indicate instruments and shelter location or other location of each

Instrument	Large	Med.	Small	Other	Instrument	Large	Med.	Small	Other
Telepsychrometer Type ___					Telethermometer				
					Telethermoscope				
Hygrothermometer					Telethermograph				
☐ Metameter					Thermograph				
Elec. Resist.: Slide wire ☐ Single ☐ Double					Thermometers Maximum				
Dewcel hygrometer					Minimum		X		
Hygrothermograph					Dial type max-min				
Hygrograph					Dry bulb		removed		
Psychrometer aspirated by:					Wet bulb		removed		
Motor driven fan		X(Not in use)			Other instruments (Specify)	three aspirated thermohms			
Hand-driven fan					42.4, 27.9, 3.8' above snow surface				
Whirling mechanism: Hand-crank									
Sling	Located in office								

e. Are minimum thermometers mounted on a separate post? in shelters ☐ No

2. Describe and give location of nearby objects which affect temperature and humidity values, e.g., building, chimneys, trees, pavement, evaporative coolers, steam vents, etc. For ground installations, indicate nature of surface material under and around shelter or support (sod, gravel, etc.) (If more space is needed, continue on reverse.)

SURFACE ENTIRELY SNOW. PREVAILING WIND FROM NNE(GRID) SO CAMP RARELY AFFECTS INSTRUMENT EXPOSURE. NO HUMIDITY MEASUREMENTS ARE MADE WITH CURRENT INSTRUMENTS AS TEMPERATURES TOO LOW.

Section IIB- SNOW TEMPERATURE MEASURING AND RECORDING EQUIPMENT

1. Type of recorder	2. Depth of each thermohm (Indicate unit, e.g., cm, ft, in.)
WHEATSTONE BRIDGE; POTENTIOMETERS	SHALLOW THERMOHMS: -5,-10,-15,-25,-50CM; Not readable. Others are: -3.2, -4.8, -6.5 -11.6 -14.2,-20.7,-25.0 & -33.9' feet.

3. Describe surface of soil (type of soil and soil cover), drainage, direction and degree of slope, shade, etc., of plot. (If more space is needed, continue on reverse).

Snow surface realtively flat with changing sastrugi. Snow depth is approximately 8000 to 9000 feet. Depths of thermohms change due to changing snow surface caused by the ever-constant surface winds.

 USCOMM-WB-DC

WB FORM 500-10 (4-24-63) U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

RAO APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN, SUPERVISORY MET. TECHNICIAN

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL	NO. 1	2 f,g	NONE

Section III - CEILING MEASURING AND RECORDING EQUIPMENT

1. Balloons (ceiling) (Check) ☐ 10-Gram ☐ 30-Gram NONE ON HAND

2. Ceiling light

a. Make	b. Model or type
CROUSE-HINDS	K100

c. Diameter (Inches)	Cover glass	Primary reflector	Secondary reflector
	16"	16"	5"

d. Cable	Length (Feet)	Gage	Conductors	Type
	550'	14	2	Rubber covered

e. Lamp	Volts	Watts	Type (No.)	Base type
NONE	12	420	420G25P/12	MOGUL PREFOCUS

f. Location with respect to office building CEILING LIGHT NOT IN USE.

Projector	Observation point	g. Length of baseline (feet)
550' GRID NORTH	500' GRID NORTH	500'

3. Ceilometer

	Make	Type of lamp	Location with respect to office
a. Projector	Fixed beam		
	Rotating beam	N	
b. Detector	Fixed beam	0 N	
	Rotating beam	E	
c. 2nd detector	Rotating beam		

d. Recorder	Make	Type
	Fixed beam	
	Rotating beam	

4. Attach drawing of location of separate accessory items such as control switches, relays, fuses, mark-time switches magnetic contactors, etc., and location of cable, conduit, etc. hidden in walls or underground OR check box and ENTER date. ☐ No change in previous drawings dated

Section IV - VISIBILITY CHARTS AND EQUIPMENT

1. Stations reporting visibility attach to this form two visibility charts on WB Form 610-2A, one chart will include all markers throughout the entire range of visible objects. The other, on an exploded scale, will include only those markers within 1-1/2 miles of the observation point. Include the location of any control tower from which visibility observations are taken. (Use Cir.N, Chapt. 2 for a guide.) OR check box and ENTER date. NEW CHARTS SUBMITTED ☐ No change in previous charts dated

2. Transmissometer(s)

a. Make	b. Model or type
N	

c. Location with respect to office: 0

d. Location with respect to ILS runway	e. Baseline (ft.)
N E	

f. Location of recorders and indicators used (Tower, WB office, etc.)

3. Attach drawings of location of separate accessory items and location of cable, conduit, etc. hidden in walls or underground. OR check box and ENTER date. ☐ No change in previous drawings dated

WB FORM 500-10 (4-24-56) — U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

R A O APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN, SUPERVISORY MET. TECHNICIAN

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL	1a,c		

Section V - WIND MEASURING AND RECORDING EQUIPMENT (Submit data as follows for each installation under items 1 and 2.)

1. Wind system (Direct reading)

a. Check which: ☐ F420A ☐ F420B ☐ F420C ☐ F430 ☐ F431 XX Other (Specify) BENDIX-FRIEZ AEROVANE SYSTEM

b. Height of rotor and vane above: Ground (Ft.) 30' over snow; Roof (Ft.)

c. Number and location of repeator indicators in system: ONE INDICATOR LOCATED IN PASSAGEWAY OUTSIDE WEATHER OFFICE.

d. Recorder (Check which): ☐ F311 ☐ F312 ☐ F313 XX Other (Specify) B-F AEROVANE — Chart No. 516993

e. Cable: Length (Ft.) 300' — Gage 13 — Conductors

f. Location of rotor and vane: ON STEEL MAST BEARING 13 DEGREES 200' FROM MET. OFFICE

g. Owner of system, or components (Specify) when other than Weather Bureau:

2. Wind system composed of

a. Anemometer (Check which): ☐ F103 ☐ F102 ☐ Other (Specify)

b. Height of rotor above: Ground (Ft.); Roof (Ft.)

c. Wind vane (Check which): ☐ F010 ☐ F011 ☐ Other (Specify)

d. Height of vane above: Ground (Ft.); Roof (Ft.)

e. Indicator (Check which): ☐ F221 ☐ F221A ☐ Other (Specify)

f. Cable: Length (Ft.); Gage; Conductors

g. Location of rotor and vane:

h. Owner of system, or components (Specify) when other than Weather Bureau:

3. Attach drawing of location of cable or conduit connecting the sensing elements to the indicators, power source, etc., and the location of objects suspected of causing nonrepresentative speed or direction values OR check box and ENTER date. — XXXNo change in previous drawings dated

Section VI - SUNSHINE DURATION EQUIPMENT NONE * ALL SUNSHINE EQUIPMENT REMOVED 12/31/62

1. Switch

a. Type (Check which): ☐ Marvin mercury ☐ Photoelectric ☐ Other (Specify)

b. Location

2. Recorder

a. Make

b. Type

WB FORM 500-10 (4-24-68) U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

R A O APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN, SUP. MET. TECHNICIAN

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL			DATE UNKNOWN 8 INCH PRECIPITATION GAGE REMOVED

Section VII - PRECIPITATION MEASURING AND RECORDING EQUIPMENT

1. Eight-inch non-recording gage
- a. Top of gage above: Ground (Ft.) REMOVED; Roof (Ft.)
- b. Shielded: ☐ Yes ☐ No

2. Tipping-bucket gage
- a. Make
- b. Top of gage above: Ground (Ft.); Roof (Ft.)
- c. Shielded: ☐ Yes ☐ No

3. Weighing-type, recording gage
- a. Make
- b. Model
- c. Traverse: ☐ Single ☐ Double ☐ Triple
- d. Capacity (inches): ☐ 2.4 ☐ 6 ☐ 9 ☐ 12
- e. Gears (hours): ☐ 6 ☐ 12 ☐ 24
- f. Chart No.
- g. Top of gage above: Ground (Ft.); Roof (Ft.)
- h. Shielded: ☐ Yes ☐ No

4. Describe the installation of the gages telling location and height of local obstructions which might affect the catch (i.e., trees, buildings, overhead wires, etc.), and how the gages are anchored to the surface

DUE TO NEARLY CONSTANT WIND FLOW AND PAUCITY OF SNOWFALL 8 INCH GAGE REMOVED. 50 SNOW STAKES LOCATED APPROXIMATELY 600 FEET GRID NNW OF WEATHER OFFICE ARE READ AT BEGINNING OF EACH MONTH AND PRECIPITATION(SNOW) ACCUMULATION OR DEFICIT DETERMINED FROM COMPARING READINGS ON MONTHLY BASIS. SNOW STAKE FIELD APPROXIMATELY 75 FEET WIDE AND 100 FEET LONG. STAKES APPROXIMATELY 10' APART. FIELD ORIENTATED APPROX GRID EAST-WEST SINCE PREVAILING WIND NNE.

5. List special equipment used such as towers, shields, snow gages, etc.

SNOW STAKE FIELD CONSISTING OF 50 SNOW STAKES. MEASURED BEGINNING EACH MONTH.

6. Weighing-type scale (for water equivalent of snow) ☐ Yes ☐ No — Make

7. Attach drawings of wiring for the tipping-bucket gage, OR check box and ENTER date — ☐ No change in previous drawings dated

Section VIII - MULTIPLE REGISTERS AND TOTALIZING INDICATORS

1. Register (Check type) ☐ Triple register ☐ M003 ☐ Other (Specify)

2. Elements recorded (Check each) ☐ Wind speed ☐ Wind direction ☐ Other (Specify) ☐ Rainfall ☐ Sunshine

3. Elements totalized (Check one or more) ☐ None ☐ Sunshine ☐ Wind speed ☐ Rainfall

4. Storage battery
- a. Make
- b. Volts
- c. Ampere/hour capacity

5. Battery charger
- a. Make
- b. Type/model
- c. Volts
- d. Ampere/hour capacity

6. Selenium-rectifier-type power supply (Check one) ☐ Yes ☐ No

7. Attach drawing of wiring for multiple register and totalizing indicators, OR check box and ENTER date. — ☐ No change in previous drawings dated

WB FORM 500-10 (1-60) U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

Form WBAN 54-1.2. 1A

STATION DESCRIPTION AND INSTRUMENTATION

RAO APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN, SUP. MET. TECHNICIAN

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL			

Section IX - PRESSURE MEASURING EQUIPMENT. All data on this page shall apply to the current location of instruments. *(See the addendum to Circular N or Manual of Barometry for definitions and instructions relative to changes in barometer elevation)*

Part A - HEIGHT AND ELEVATION DATA PERTAINING TO THE MERCURIAL STATION BAROMETER

Description of data: Item	Check one: Above	Check one: Below	Height or elevation in feet and hundredths	Authority (Agency or title of Surveyor)	Form or publication giving survey information	Date of form (or survey)
1. Height of ivory (or zero) point of barometer, H_z, above or below fixed point						
2. Height of fixed point, H_x, above or below reference plane						
3. Height of barometer, H_z, above or below reference plane						
4. Elevation of reference plane above mean sea level						
5. Elevation of ivory (or zero) point of barometer, H_z, above mean sea level			9,186			Early 1957
6. Describe and identify fixed point						
7. Describe and identify reference plane						

Part B - MERCURIAL BAROMETER DATA

Barometer data		Station barometer	Extra barometer
1. Barometer serial number		530	
2. Scale range ☒ In. ☐ Mb.	From	14.0	
	To	31.0	
3. Cistern type (adjustable or fixed)			
4. Elevation of ivory (or zero) point, ft. (MSL)			
11. Latitude 90° 00′ ☐ N ☒ S			
12. Assigned station elevation H_p	Feet	9186	
13. Field elevation H_a		9186	
14. Climatological station elev. H_{pc}		9186	
15. Assigned station elevation in gpft. if height of 850 mb. surface is computed			
16. Normal annual temperature ..... MINUS 56.6	°F		
17. Mean annual pressure at barometer elevation, H_z, (enter to nearest 0.1 in. H_g) 20.1			

Barometer corrections ☐ In. ☐ Mb.	Station barometer	Extra barometer
5. For scale errors and capillarity	-.009	
6. For gravity	+.034	
7. Removal correction (reduction from H_z to H_p)	0	
8. Sum of above corrections	+.025	

9. Variable removal Correction used ☐ Yes ☒ No

10. Residual Correction used ☐ Yes ☒ No

Part C - ANEROID BAROMETER

1. Make	2. Scale range	From	To
KOLLSMAN	☐ In. ☒ Mb.	620	940

3. Elevation above mean sea level (to the nearest whole foot) — Feet: 9186

Part D - BAROGRAPH

1. Make	2. Scale range	From	To
☒ FRIEZ	☒ In. ☐ Mb.	19.00	21.50

3. Gears (day) ☐ 1/4 ☒ 1/2 ☐ 1 ☐ 4 ☐ 7

4. Type of mounting (rigid, felt, rubber, springs, etc.)	5. Elevation above mean sea level (to the nearest whole foot)	Feet
Rubber		9186

WB FORM 500-10 (1-60) — U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

RAO APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN SUP. MET. TECHNICIAN

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL			

Section X - WINDS ALOFT EQUIPMENT AND HISTORY

1. Balloon inflation

a. Inflation room for	b. Location (Check which) Sep. bldg	Office bldg.	Other (Specify)	c. Location with respect to office and release point
☐ Pilot ☒ Raob ☐ Combination	X			213' grid E of Met. office; thru overhead hatch of inflation shelter
☒ Pilot ☐ Raob	N O N E			

d. Inside dimensions	Height Feet	Height Inches	Width Feet	Width Inches	Length Feet	Length Inches	e. Heated Yes	e. Heated No	If "Yes," by what method
☐ Pilot ☒ Raob ☐ Combination	12 (14 over doors)	00	15	4	19	4	X		Oil heater in adjacent room w/ fan.
☐ Pilot ☐ Raob									
f. Balloon exit(s) Number 1	8' x	8' overhead hatch							
Number 2									

g. Helium pipe line (Check one or more)	h. Helium used per year (No. of cylinders)	i. Avge. no. of cylinders stored at one time
☐ Yes ☐ No ☐ High pressure ☐ Low pressure	N O H E L I U M	

j. Cylinders stored (location)

k. No. of hydrogen generators on hand	l. Type	m. Kind of chemicals used
3	GILL LOW PRESSURE(2) SMALL PIBAL SIZE (1)	ALUMINUM CHIPS & CAUSTIC SODA GRANULAR CALCIUM HYDRIDE

n. Describe balloon conditioning equipment and any special features of the winds aloft equipment

Dry heat box of local manufacture in which temp 95 to 105 degrees F. for 24 hours:then moist heat box 75 deg. C. for 24 hours. Diesel treated in Winter

2. Historical winds-aloft observation record (from first location, or observational change, immediately prior to January 1, 1950) Enter "P" for pibal, "RW", for rawin, and "RB" for rabal. If more than one type is made at a scheduled time, indicate predominant type. Once a complete history of observations has been recorded on this form, only the last entry of the previous form and subsequent changes need to be recorded preceded by this note: For previous record see form prepared 12/31/61

Place of observation (Name of airport, building, etc.)	Period of observations (dates) From	To	No. of obs. daily	Times (GCT) and types of observations Time	Type	Time	Type	Time	Type	Time	Type
RADOME ABOVE MESS BLDG.	3/27/57	PRESENT	2	0000	RW			1200	RW		
			(ONLY 0000Z RW TAKEN DURING DARK PERIOD 1963 - ~~from 2/16/63 to 11/1/63~~)(RADIOMETERSONDES FLOWN EVERY THIRD DAY FROM ~~3/22/63 to 9/21/63~~) 0000Z.								
PIBAL SHELTER ADJACENT TO											
INFLATION BLDG	3/57	PRIOR TO	PIBALS & CEILING BALLOONS								
		1 961	NO PIBAL QUARTERS AS SUCH EXIST AS OF								
			THIS DATE..REMOVED 3/63.								

WB FORM 500-10 (4-24-58) — U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

RAO APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN, SUP. MET. TECHNICIAN

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL			

Section X - WINDS ALOFT EQUIPMENT AND HISTORY (Continued)

3. Pilot balloon equipment

a. Theodolite(s) (Complete these data for each)

	Make	Sep. wide angle: Yes	Sep. wide angle: No	Support: Adjust., anchored	Support: Tripod
(1)	DAVID WHITE	X			X
(2)					

b. Theodolite platform(s) (Complete these data for each)

	Location with respect to office building	On tower, building, etc. (Specify)
(1)	ABOVE MET OFFICE	ON SE(GRID) CORNER OF RADOME PLATFORM
(2)		

	Wind break: Yes	Wind break: No	Height of sides (feet)	Type of construction
(1)		X		
(2)				

	Dome: Yes	Dome: No	Describe	Elevation of floor (meters and tenths): Above ~~ground~~ SNOW	Elevation of floor (meters and tenths): Above mean sea level
(1)		X	TRIPOD IS SET UP ON GRID SE CORNER RADOME PLATFORM	2 meters	2803.6 m
(2)					

c. Identify check point(s): FLAGPOLE AT SITE OF SOUTH POLE METEOROLOGICAL TOWER (TOP PLATE)

Elevation angle: 0.2 / 7.1   Azimuth angle: 331° / 193.6°

4. Rawinsonde equipment

a. Tracking equipment

☐ SCR-658 ☐ GMD-1 ☒ GMD-1A ☐ WBRT-57 ☐ Other (Specify)

b. Location and distance from office building: DIRECTLY ABOVE MET. OFFICE

c. Elev. of center of antenna (meters and tenths): Above ~~ground~~ SNOW 3.5m; Above mean sea level 2807.1 m.

d. Identify check point(s): R/S TRANSMITTER ON AURORA TOWER

Elevation angle: 2.8°   Azimuth angle: 267.4°

e. Type of shelter for tracking equipment and observer: STANDARD WB RADOME FOR TRACKING ANTENNA AND RECEIVERS; RECORDERS IN MET OFFICE DIRECTLY BELOW

f. Method of heating shelter: ELECTRIC HEATERS AND DUCTS FROM MAIN HEATER IN MESS HALL.

g. Is forced ventilation used? ☐ Yes ☒ No

h. Describe ventilation system:

i. Winds-aloft ploting board used in shelter? ☐ Yes ☒ No

Size of board:

Method of mounting board: BOARD MOUNTED ON WALL IN MET OFFICE

5. Intercommunication facilities

Check which

☐ Raob recorder to theodolite platform
☐ Raob recorder to rawinsonde equipment
☐ Raob recorder to instrument shelter
☒ Raob recorder to release area
☐ Theodolite platform to rawinsonde equipment
☒ Other (Explain) COMMUNCIATIONS TO HARRINGTON HOUSE AND THE NRL BLDG. AND TO BAKER GENERATOR HOUSING.

WB FORM 500-10 (1-60) — U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

RAO APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN SUP. MET. TECHNICIAN

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL		1c; 2a	APPROXIMATELY IN SAME LOCATION BUT NOW SIDE BY SIDE ON ROLLER STAND

Section XI - RADIOSONDE EQUIPMENT AND HISTORY

1. Recorder	a. Make: LEEDS & NORTHRUP LEEDS & NORTHRUP	b. Type: SPEEDOMAX G RFR (BOTH CONTINUOUS TRACE)	c. Length of cable tracking set to recorder: 50'
2. Baseline check box	a. Location with respect to recorder: 8' from RFR 12' from Speedomax type G	b. Type: WB III 1680mcs.	
3. Elevation	a. Floor of surface observation instrument shelter: None	Above mean sea level	Meters and tenths
		In geopotential meters (as supplied by Central Office)	Gpm and tenths
	b. Table top where pressure-contact settings are made (above mean sea level): 9186		Meters and tenths: 2800.
4. Correction for difference in elevation between barometer and floor of instrument shelter			Millibars: None

5. Emergency power	a. Check one	b. Generator owned by	c. Output (kw) available to Weather Bureau	d. Phase	e. Voltage
	☐ Yes ☒ No			☐ Single ☐ 3-phase	

6. Describe unusual aspects of installation, such as use of preamplifiers, etc.

GMD1A system is on ~~Sorenson~~ Sorenson-type Voltage regulator to maintain constant voltage.

7. Attach drawing showing the wiring between the power supply, tracking set, radiosonde recorder, and related units. Show location of hidden cables, conduit, junction boxes etc. OR check box and ENTER date.

☒ No change in previous drawings dated

8. Historical radiosonde observation record (from first location, or observational change, immediately prior to Jan. 1, 1950) Once a complete history of observations has been recorded on this form, only the last entry of the previous form and subsequent changes need to be recorded preceded by this note: For previous record see form prepared _____.

Place of observation (Name of airport, building, etc.)	Period of observations (dates) From	To	No. of obs. daily	Time (GCT) of observations Time	Time	Time	Time
MESS HALL BLDG.	3/27/57	Present	1#	0000			
			# Only 0000Z observation taken from 2/16/63 to present - during summer period the 1200Z observation taken also.				

NOTES ON INFLATION BLDG AND HEATER ROOM

1. In January, 1963 moved new Gill Hydrogen Generator into inflation building in place of old Gill. Moved old gill to opposite corner of room.
2. Mr. Roberts built a storage bin to hold the aluminum chips - it was initailly filled with approximately one ton of the chips. A small box at bottom was used as dipping space to fill cream can with sufficient aluminum to generate gas. Dipping space was not shown.
3. The storage Wonder-Arch is quite close to inflation building. Outside it does prevent somewhat the making of a running release of raob balloon account of danger of falling into the sloping area around the sides of the arch...they are not packed in with snow yet.
4. All remnants of the PIBAL area that was above the heater room have been removed, and a ceiling 7' high above the floor was laid by HRS and KJ to aid in cutting down the amount of space the ONE Preway heater would have to heat. As can be seen from the drawing the Preway heats the entire space of the inflation building too.
5. DURING THE winter of '63 an effort was made to heat Baker generator space too by opening a circulation system between heater room, inflation building, through the duct for the Baker Generator hose, then through the duct from the Baker room back to inflation(heater) room. The one fan shown was supported by another fan placed just in front of the duct as it entered the heater room from the Baker room. It was just too cold to do much good!
6. The one preway does an adequate job in periods of light wind, raising the temperature in the inflation room to +20C and sometimes higher - but its not very effective during winds that exceed 18 to 20 knots.
7. The home-made dry heat balloon conditioner is sitting on top of moist heat conditioner. No definite results obtained as to whether this dry heat box helped in attaining higher flights.

hrs

WB-FORM 500-10 (4-24-58) — U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

RAO APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA

Prepared by (Name, title, station and date): HARRY R. SPOHN, SUP. MET. TECHNICIAN

Effective Date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
ANNUAL	ALL ITEMS EXCEPT 2a		ALL RADIATION EQUIPMENT REMOVED 12/31/62 EXCEPT ONE B&W RADIOMETER(NET)

Section XII - SOLAR RADIATION EQUIPMENT

1. Pyrheliometers

a. Total solar Eppley radiation (Check each type used)

☐ 10-junction ☐ 50-junction

b. Describe location

ALL REMOVED FOR 1963

c. Normal incidence radiation, Eppley. Describe location

d. Other BECKMAN & WHITLEY NET RADIOMETER

No. of junctions	Make
1	

Describe location

RADIOMETER LOCATED 200' FEET DUE GRID NORTH OF OFFICE,, USED AS AID IN CLOUD DETECTION DURING DARK PERIOD OF 1963..THUS..ANY CLOUD PASSING OVER RADIOMETER WOULD CAUSE SHIFT OF TRACE ON RECORDER IN OFFICE.

2. Recorders

	Make and model	Chart No.
a. Roll chart	L&N 6pt AZAR 1178098;1178058;1203244 L&N 2pt TEMP 1219388;1219508	857 857
b. Circular chart		

c. Describe location

Located in rack in Harrington house..to be re-installed for commencement of full Radiation program again in 1964 on Nov. 1, 1963.

3. Attach drawing showing current location of wiring between pyrheliometer and recorder OR check box and ENTER date. ☐ No change in previous drawings dated

WB FORM 500-10 (4-24-58) — U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

RAO APPROVAL

Station: AMUNDSEN-SCOTT, SOUTH POLE ~~ANTARCTICA~~

Prepared by (Name, title, station and date): HARRY B. SPOHN, SUP. MET. TECH.

Effective date: AUGUST 1, 1963

Reason for rendition	Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and direction from previous location)
ANNUAL			

Section XIII - RADAR EQUIPMENT

1 a. Type radar: NONE	b. Wave length (cm.)	c. Max. range (nautical miles)	
2. Antenna	a. Location with respect to office	b. Height above ground (feet) center of reflector	
3. Console	a. Location	b. Can room be darkened? ☐ Yes ☐ No	
4. Repeater indicators	a. Type(s)	b. Location	
5. Camera	a. Type(s)	b. Mounted on (Check one) ☐ PPI ☐ Repeater ☐ Slave scope	
		☐ PPI ☐ Repeater ☐ Slave scope	
6. Auxiliary power supply	a. Check one ☐ Yes ☐ No	b. Type	
	c. Location		
7. Orientation check point	a. Azimuth °	b. Range (nautical miles)	c. Describe
8. Equipment	a. Owned by	b. Maintained by	

9. On polar coordinate paper (WB Form 610-2A) plot the azimuth angles and give the elevation angles of all objects within 100 nautical miles of the radar antenna site which intercept the center of the radar beam when the beam is projected horizontally at 0.0° antenna tilt. Use TA-610-0-1 to determine which objects intercept the center of the beam. Attach diagram to this page OR check box and ENTER date ☐ No change in previous diagrams dated

10. Describe communication facilities and unusual features of installation or of operating and reporting procedures

11. Historical radar observation record (from date of first observation)
List any prolonged outages and dates. Show modifications and changes in models, etc.

Place of observation (Name of airport, building, etc.)	Period of observations (dates) From	To	Model or type	Antenna size (Feet)	Antenna height above ground (feet) (measured to center of parabolic reflector)

SUPPLEMENTAL SHEET TO WBAN 10D DATED AUGUST 1, 1963

HEIGHTS AND DEPTHS OF THERMOHMS AS OF THIS DATE:

ASPIRATED THERMOHMS: +42.4' +27.9' +3.8'

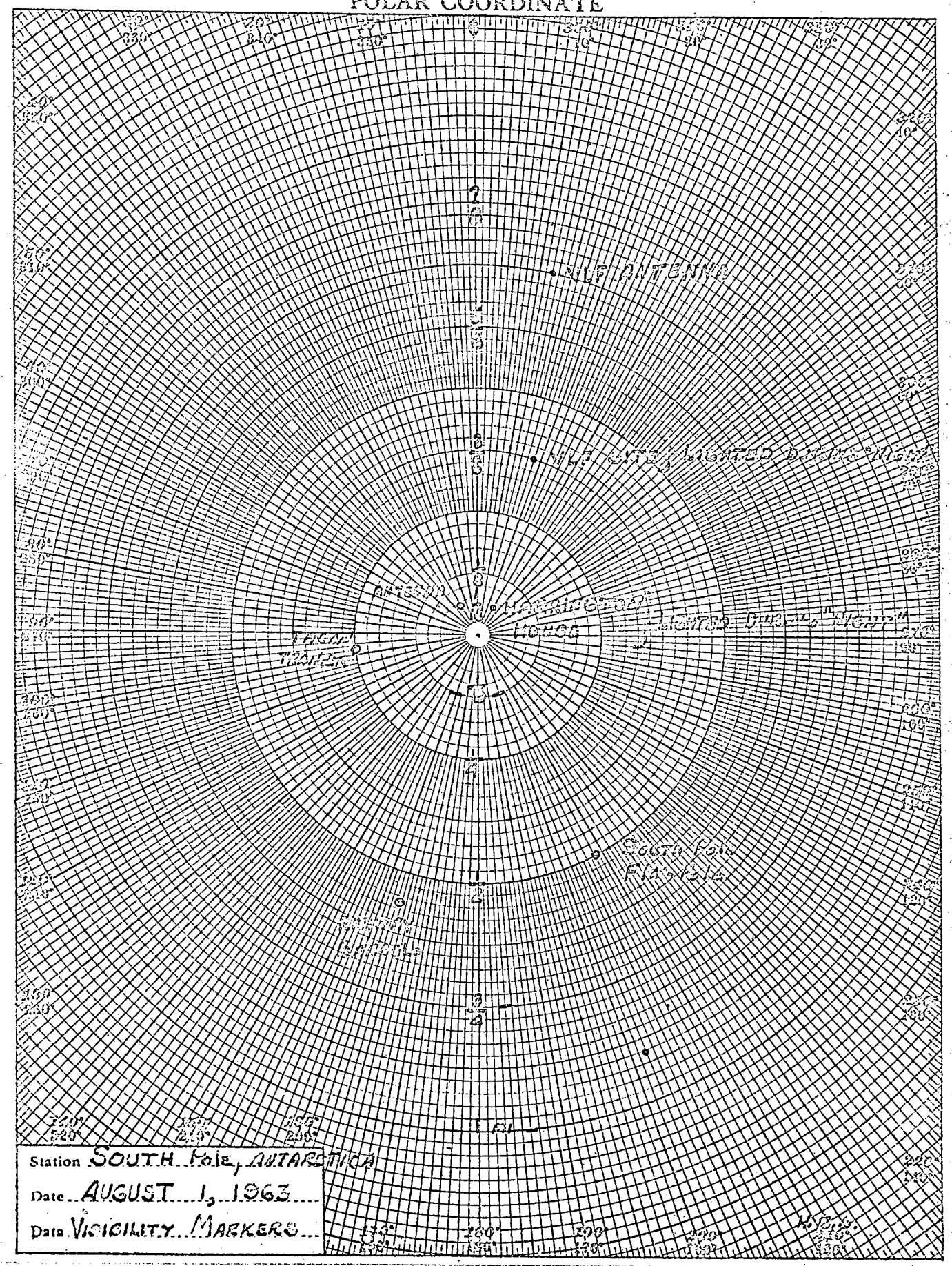
SUBSURFACE THERMOHMS -3.2' -4.8' -6.5'
-11.6' -14.2' -20.7' -26.0' -33.9'

THERMOHMS AT -5, -10, -15, -25, -50 cetimeters became inoperative 12/4/62 when Construction crew cut wires. Have not been fixed account no correct wire on hand.

WB Form 510-2A
(Formerly 1140) (5-55)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

POLAR COORDINATE



Station SOUTH POLE, ANTARCTICA

Date AUGUST 1, 1963

Data VICINITY MARKERS

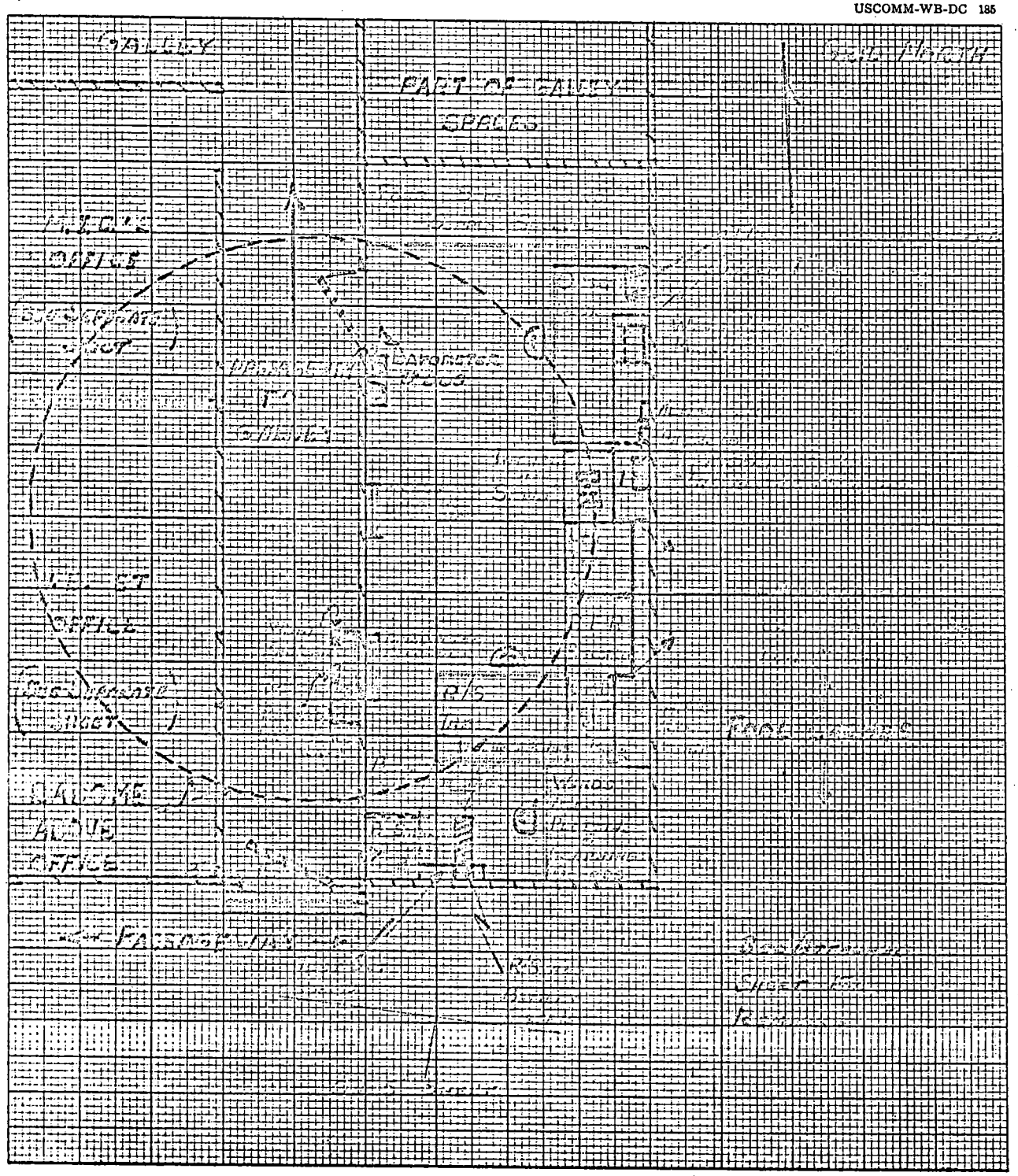
WB Form 500-11
(6-68)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
INSTRUMENT EXPOSURE AND STATION LAYOUT DIAGRAM

1

Station	Effective Date	RAO Approval
AMUNDSEN-SCOTT,SOUTH POLE, ANTARCTICA	AUGUST 1, 1963	
Prepared By *(name, title, station)* Harry R. Spohn, Sup.Met.Tech. Amundsen-Scott, South Pole, Antarctica	**Reason for Rendition** Changes made during 1962-63	
Use this form for scale diagrams prepared as attachments to WB Form 500-10 MAIN WEATHER BUREAU OFFICE IN GALLEY BUILDING	**Scale** 1" = 1'	**Orientation of North** Grid N = 0°LONG.

USCOMM-WB-DC 185



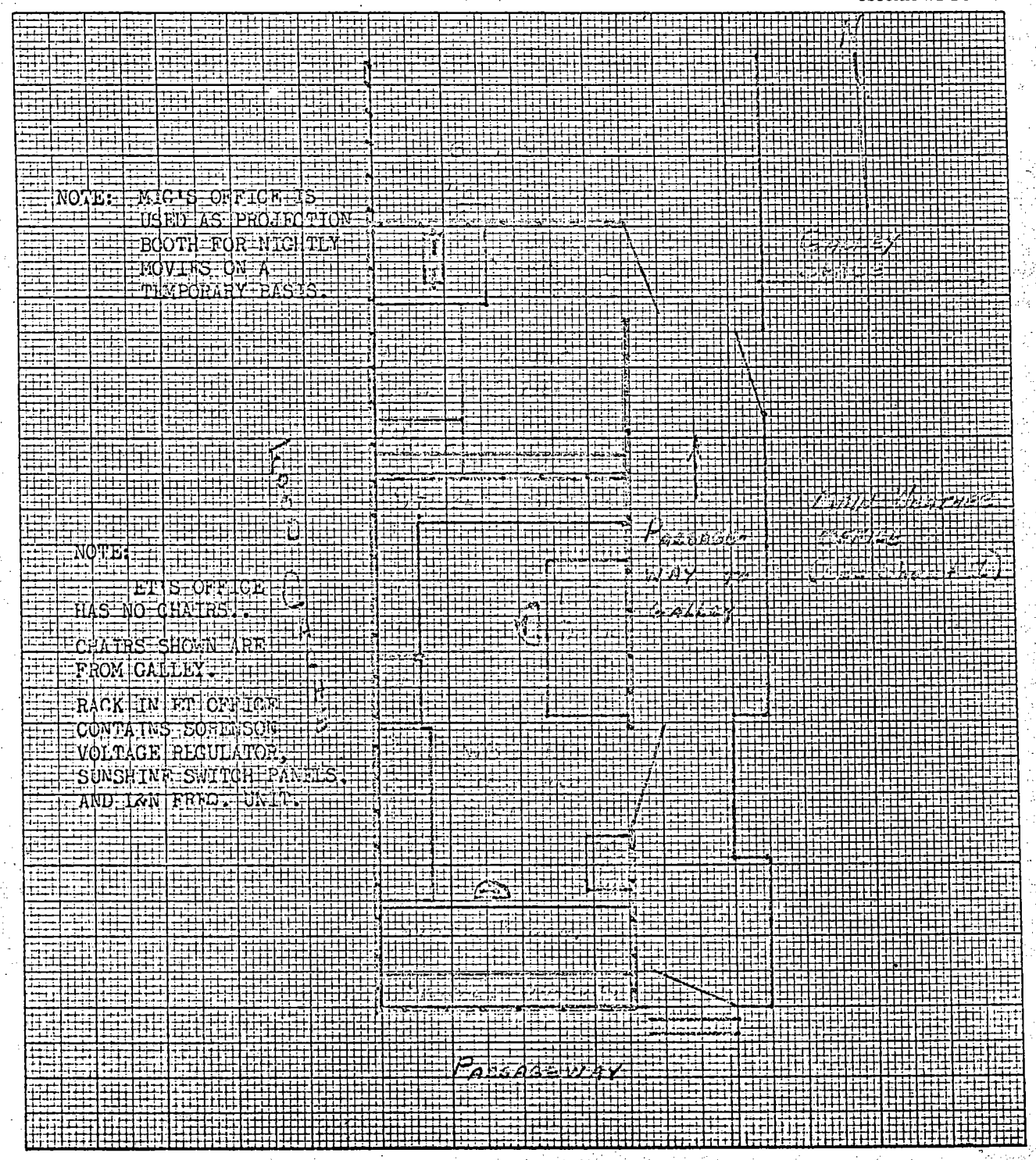
WB Form 500-11
(5-63)
(Formerly 460-2)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
INSTRUMENT EXPOSURE AND STATION LAYOUT DIAGRAM

2

Station	Effective Date	RAO Approval
AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	AUGUST 1, 1963	
Prepared By *(name, title, station)* HARRY R. SPOHN, SUP. METCH. AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	**Reason for Rendition** REFLECT CHANGES MADE DURING 1962-63	
Use this form for scale diagrams prepared as attachments to WB Form 500-10. NEW ~~MIC'S~~ OFFICE AND ENLARGED ET QUARTERS	**Scale** 1/4" = 1'	**Orientation of North** Grid N = 0 Long.

USCOMM-WB-DC 186



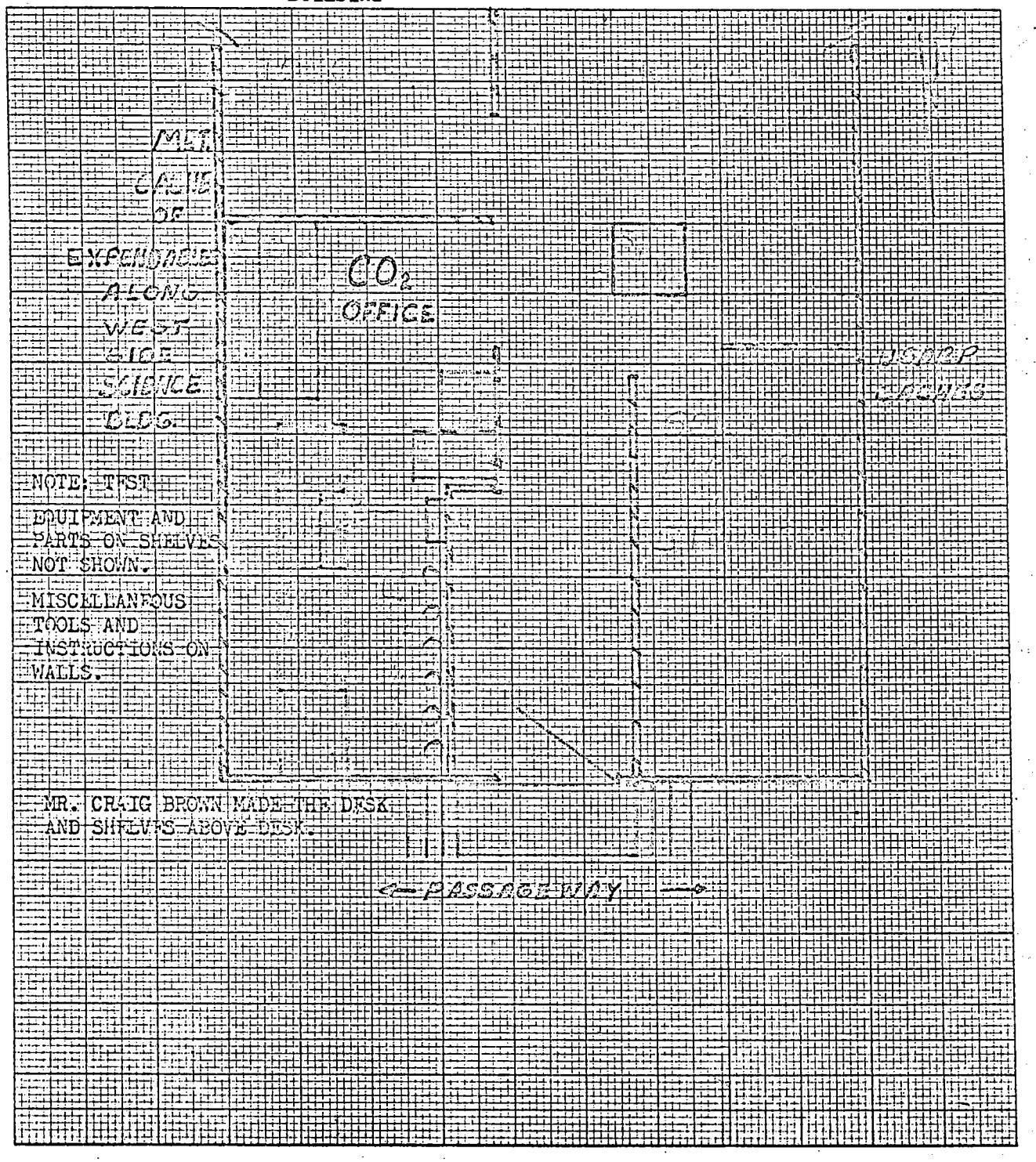
WB Form 500-11
(5-58)
(Formerly 450-2)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
INSTRUMENT EXPOSURE AND STATION LAYOUT DIAGRAM

3

Station	Effective Date	RAO Approval
AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	AUGUST 1, 1963	
Prepared By *(name, title, station)* HARRY R. SPOHN, SUP. METECH. AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	**Reason for Rendition** SHOW CHANGES MADE DURING 1962-63	
Use this form for scale diagrams prepared as attachments to WB Form 500-10. WB CO_2 OFFICE, SOUTH END OF SCIENCE BUILDING	**Scale** $\frac{1}{8}$" = 1'	**Orientation of North** 0° Long.=Grid N.

USCOMM-WB-DC 155



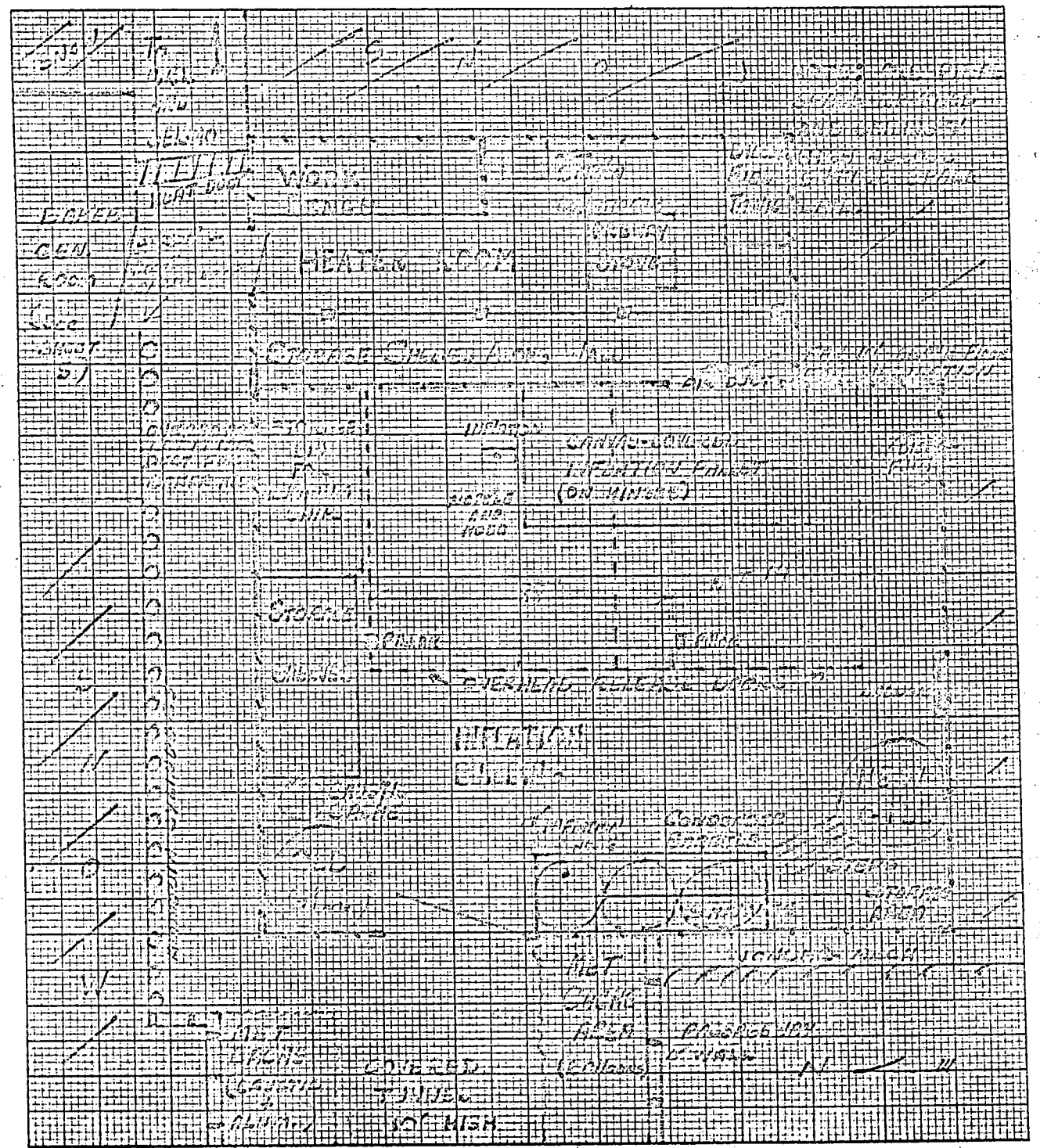
WB Form 500-11
(5-58)
(Formerly 460-2)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
INSTRUMENT EXPOSURE AND STATION LAYOUT DIAGRAM

4

Station	Effective Date	RAO Approval
AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	AUGUST 1, 1963	
Prepared By *(name, title, station)* HARRY R. SPOHN, SUP. METECH. AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	**Reason for Rendition** CHANGES MADE DURING 1962-63	
Use this form for scale diagrams prepared as attachments to WB Form 500-10. INFLATION BLDG AND ADJOINING HEATER ROOM	**Scale** 1/4" = 1'	**Orientation of North** ←

USCOMM-WB-DC 185



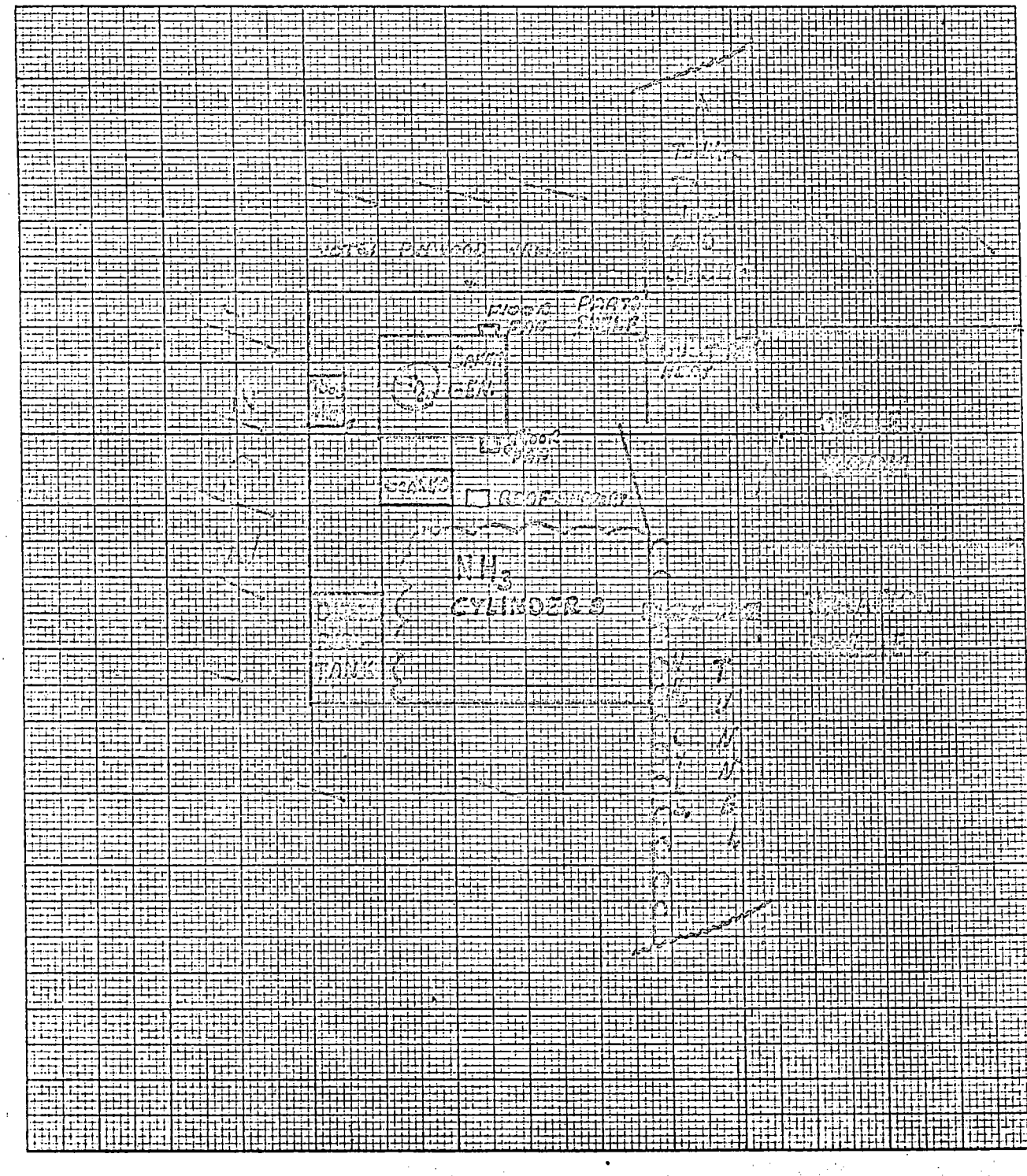
WB Form 500-11
(Formerly 460-2)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
INSTRUMENT EXPOSURE AND STATION LAYOUT DIAGRAM

5

Station AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	Effective Date AUGUST 1, 1963	RAO Approval
Prepared By *(name, title, station)* HARRY R. SPOHN, SUP. METECH AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	Reason for Rondition CHANGES DURING 1962-63	
Use this form for scale diagrams prepared as attachments to WB Form 500-10. BAKER GENERATOR ROOM ERECTED DURING 1961-62	Scale 1/4" = 1'	Orientation of North

USCOMM-WB-DC 155



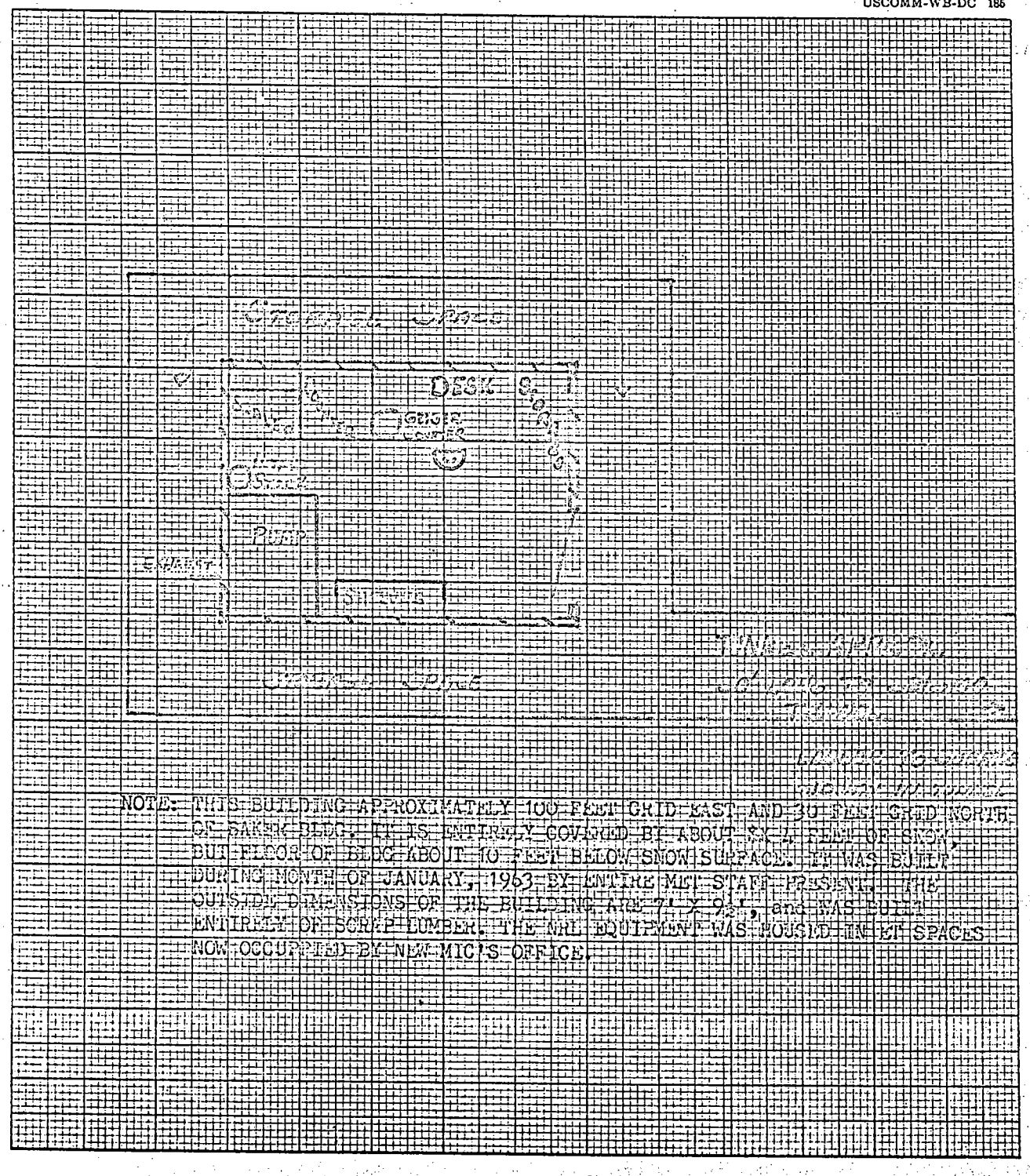
WB Form 500-11
(5-58)
(Formerly 450-2)

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
INSTRUMENT EXPOSURE AND STATION LAYOUT DIAGRAM

6

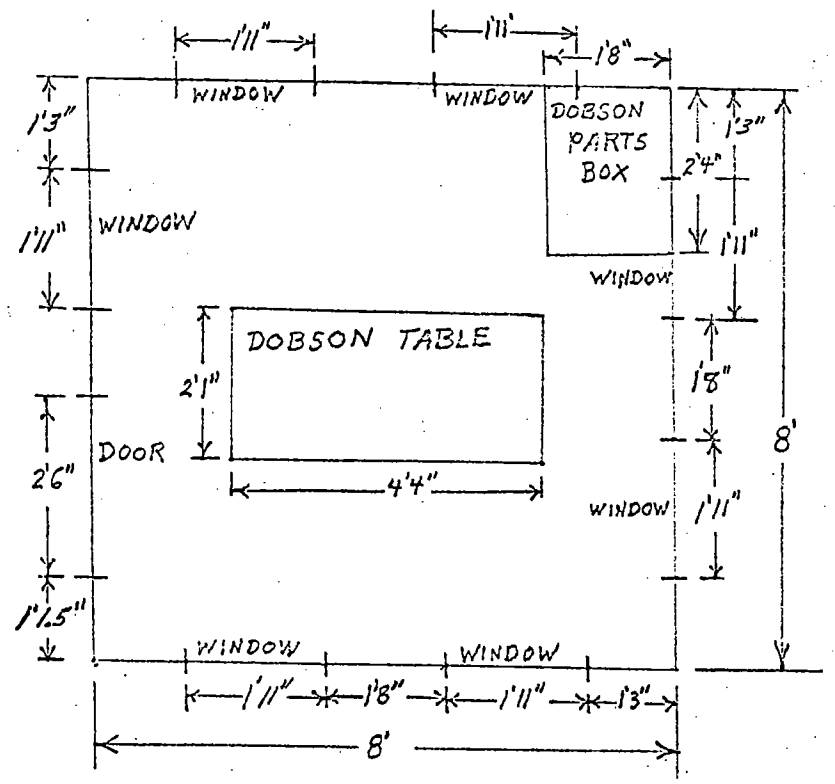
Station: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	Effective Date: AUGUST 1, 1963	RAO Approval
Prepared By (name, title, station): HARRY R. SPOHN, SUP. METECH AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA	Reason for Rendition: NEW BLDG ERECTED IN JANUARY, 1963 BY ENTIRE MET STAFF	
Use this form for scale diagrams prepared as attachments to WB Form 500-10. NRL HOUSING	Scale: ½ ¼" = 1'	Orientation of North

USCOMM-WB-DC 185



NOTE: THIS BUILDING APPROXIMATELY 100 FEET GRID EAST AND 30 FEET GRID NORTH OF BARNG BLDG. IT IS ENTIRELY COVERED BY ABOUT 5½ FEET OF SNOW, BUT FLOOR OF BLDG ABOUT 10 FEET BELOW SNOW SURFACE. IT WAS BUILT DURING MONTH OF JANUARY, 1963 BY ENTIRE MET STAFF PRESENT. THE OUTSIDE DIMENSIONS OF THE BUILDING ARE 7' x 9½', and WAS BUILT ENTIRELY OF SCRAP LUMBER. THE NRL EQUIPMENT WAS HOUSED IN ET SPACES NOW OCCUPIED BY NEW MIC'S OFFICE.

DOBSON BUILDING INTERIOR SPECIFICATIONS
U. S. WEATHER BUREAU
SOUTH POLE STATION, ANTARCTICA



SCALE:
1 INCH = 2½ FEET

NOTE: BUILDING LOCATION IS 130 FEET GRID ESE OF THE INFLATION SHELTER TOP EXIT AT THE EAST END OF THE MAIN CAMP.

DRAWING BY:
K. H. JENSEN, USWB

Aug 1, 1963

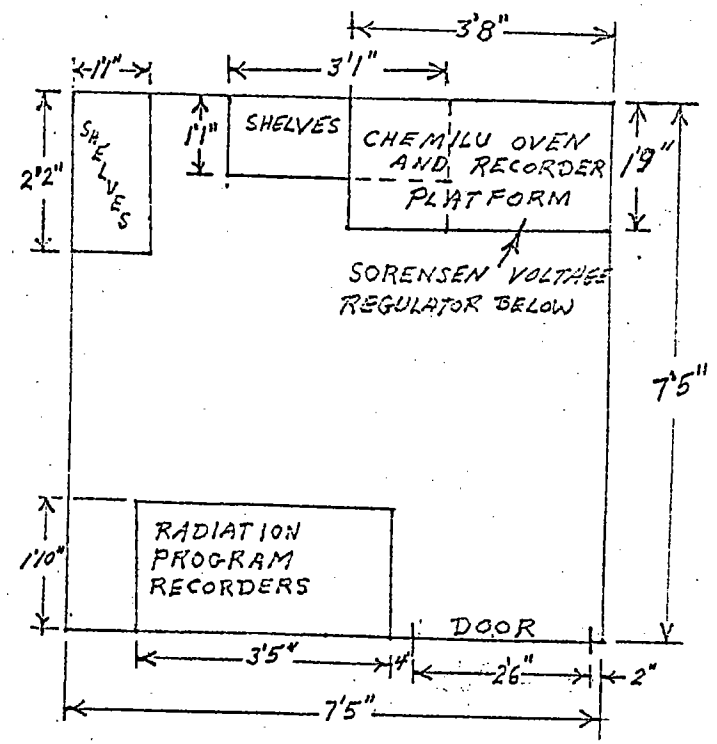
8

SOUTH POLE STATION, ANTARCTICA

HARRINGTON HOUSE

INTERIOR SPECIFICATIONS

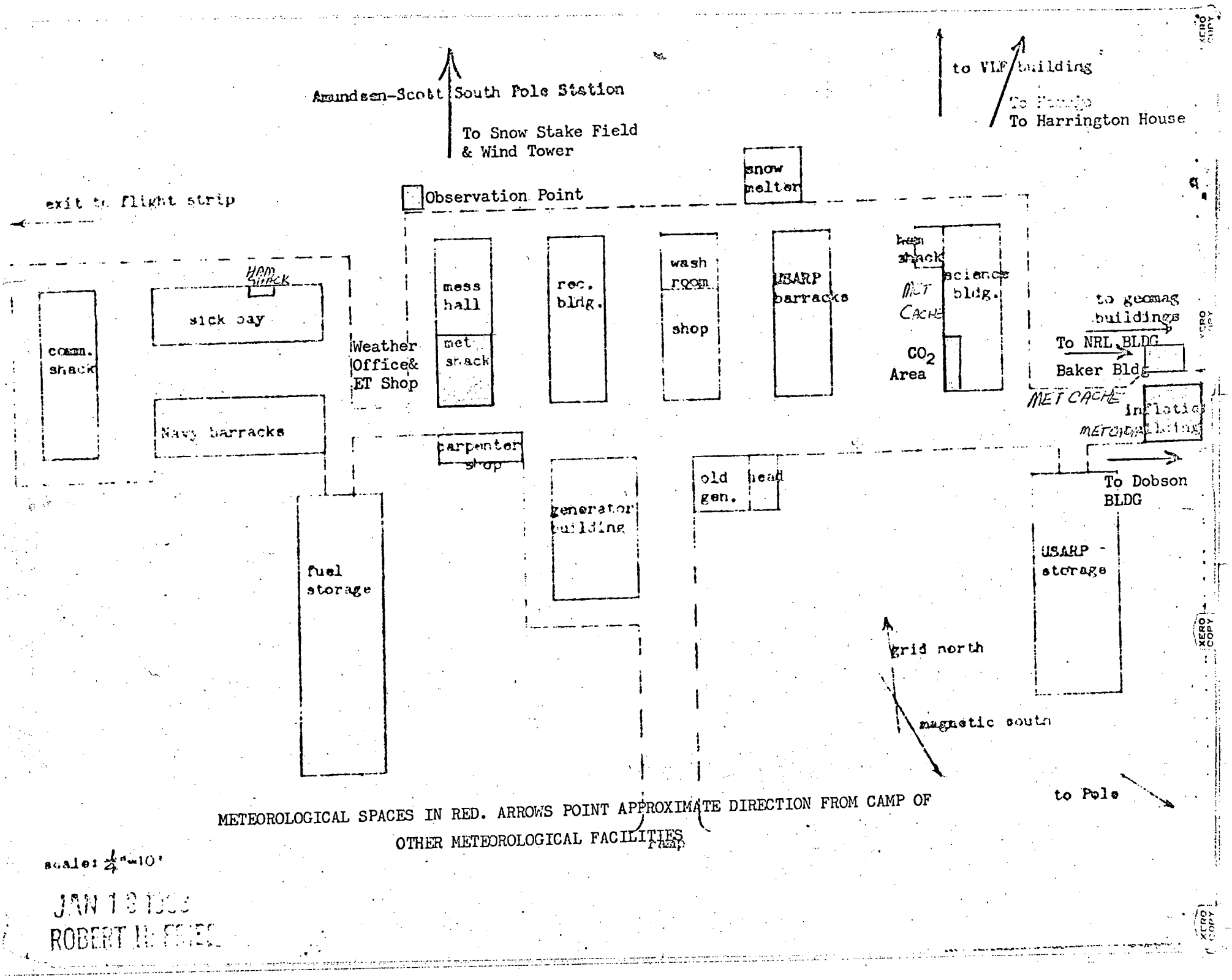
U. S. WEATHER BUREAU



SCALE: 1 INCH = 2½ FEET

NOTE: THERE IS A 3½ FOOT PASSAGE-WAY AROUND THIS BUILDING AND A 36X4 FOOT TUNNEL LEADING INTO THE BUILDING FROM THE OUTSIDE ENTRANCE. THE EXIT IS LOCATED APPROXIMATELY 300 FEET GRID NORTH OF THE INFLATION SHELTER TOP EXIT.

DRAWING BY: K.H. JENSEN USWB



METEOROLOGICAL SPACES IN RED. ARROWS POINT APPROXIMATE DIRECTION FROM CAMP OF OTHER METEOROLOGICAL FACILITIES

scale: $\frac{1}{4}$"=10'

WB FORM 500-3 (7-61)

STATION INFORMATION

RCS 500-1

U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU

I. STATION NAME: AMUNDSEN-SCOTT, SOUTH POLE — STATE OR TERRITORY: ANTARCTICA — NAME(S) OF AIRPORT (If applicable): — — TYPE: WBO

II. RENDITION 1. THIS IS A: [X] COMPLETE RENDITION [ ] SUPPLEMENT TO THE LAST COMPLETE RENDITION — DATE OF LAST RENDITION: DEC. 1, 1961 — 2. EFFECTIVE DATE: AUG. 1, 1963 — 3. PURPOSE OF RENDITION OR SUPPLEMENT: ROUTINE

III. SURFACE OBSERVATIONS - 1. SYNOPTIC (Coded 3-and 6-Hourly)

a. TIME:								
	0000Z	X	0300Z	X	0600Z	X	0900Z	X
	1200Z	X	1500Z	X	1800Z	X	2100Z	X

OBSERVATIONS MARKED * ARE REGULARLY MADE BY: ALL OBSERVATIONS BY WB PERSONNEL OBSERVERS

OBSERVATIONS MARKED # CODED (From the Aviation Weather Reports) BY: — — — (STATION)

b. SPECIAL GROUPS: 8NsChshs 9SP8Psps 3TxTxTnTn ADDED TO REPORTS

TAKEN AT: 06Z, 12Z, 18Z, 00Z

c. REPORTS ENTERED ON CIRCUIT NO. RATTY 14; CW 15 U.S.NAVY

2. AVIATION

a(1). SCHEDULED RECORD — 24 DAILY / LESS THAN 24 DAILY / LESS THAN 24 NOT DA. — PLUS SPECIALS / CHECKS / LOCAL EXTRAS

ENCODED FROM 3-AND 6-HOURLY REPORTS BY: WB Observers — TEMP & WIND ONLY. DURING FLIGHT OPS.

(2). UNSCHEDULED: ON CALL ONLY AS NEEDED BY: WB / OTHER AGENCY X

b. TIME (LST) RECORD OBSERVATIONS (When less than 24): Every 3 hours

00	01	02 59	03	04	05 59	06	07	08 59	09	10	11 59
12	13	14 59	15	16	17 59	18	19	20 59	21	22	23 59

LOCAL TIME STAND.: EST, CST, MST, PST, YST, AST, BST, OTHER (Specify): GCT

OBSERVATIONS MARKED * TAKEN BY: — OBSERVERS

c. ELEMENTS OBSERVED, CEILING AND VISUAL ELEMENTS:

SEA LEVEL PRESSURE	X	TEMPERATURE	X	DEWPOINT	—	WIND	X
ALTIMETER SETTING	X	RNWY VSBY.	—	RVR	—	REMARKS	X

d. ADDITIVE DATA: APR X, RR X, $1C_LC_MC_H$ —, $9S_pS_ps_ps_p$ X, Tn/x Tn/x X, $2h_{85}h_{85}h_{85}3$

SPECIAL GROUPS: 8NsChshs 9SP8Psps 3TxTxTnTn

APPENDED TO REPORTS AT:		0000Z	X	0300Z	X	0600Z	X
0900Z	X	1200Z	X	1500Z	X	1800Z	X
2100Z	X						

e. TRANSMISSION ON WEATHER CIRCUITS: U.S.NAVY 14&15 — NONE

RECORD OBSERVATIONS TRANSMITTED IN: 3 hourlys — REGULAR SEQUENCE COLLECTION X — A SCAN PERIOD

ON CIRCUIT(S) NO. U.S.NAVY 14&15 BY: NAVY MEN

3. OBSERVATIONS RECORDED ON FORMS: WBAN 10A X, WBAN 10B X

WBAN 10 (FAA)	610-	610-7	610-10	612-	612-13
612-14	733-1 X	1034A	OTHER		

IV. UPPER-AIR OBSERVATIONS (Enter-R for Raob, Rw for Rawin Rs for Rawinsonde and P for Pibal)

0000Z	Rs	0600Z		1200Z	Rs*	1800Z	

V. OTHER OBSERVATIONS *during Summer period

CLIMATOLOGICAL		FROZEN GROUND LAYER		SOIL SNOW TEMPERATURE	X	SUNSHINE DURATION	
EVAPORATION		ICE THICKNESS		SOLAR RADIATION		OTHER (Specify)	SURFACE
FIRE-WEATHER		RADAR		SOIL MOISTURE			RADIOACTIVITY X
FRUIT-FROST		RIVER STAGE		WATER TEMP.			

VI. COMMUNICATIONS: Call Letters NPX Index No 89009

1. REPORTS (SECOND-ORDER) TRANSMITTED TO: NAF MCMURDO SOUND (STATION)

VIA: PHONE / RADIO CW / TELEGRAPH / OTHER (Specify) RATTY — COST DAY — Each — COST NIGHT — Each

2. SERVICE A(SR) OPERATED LOCALLY BY: WB / FAA

SERVICE C(SR) OPERATED LOCALLY BY: U.S. NAVY CIRCUITS

3. LONG LINE FACILITIES: TWX: TYPE NONE CALL NO.

TYPE	CIRCUIT NO.	RONLY	SR	EQUIPMENT FURNISHED BY:
SVC. A		NO		
SVC. C		NO		
SVC. O		NO		
USAF		NO		
RAWARC		NO		SPECIAL EQUIPMENT

FACSIMILE	YES	NO	NO. RECORDERS	NO. SCANNERS
NATIONAL		X		
HIGH ALTITUDE		X		
OTHER (Specify)		—		

4. LOCAL FACILITIES		NO. OF USERS
TELAUTOGRAPH	—	—
OTHER (Specify)	—	—

5. WB LOCATION WITH RESPECT TO FAA FSS (TWR OR CS/T): IN GALLEY BLDG 150' GRID E NAVY COMM CENTER

6. BROADCASTS: DIRECT — CONTINUOUS AVIATION —

VII. SECOND-ORDER STATIONS (Miscellaneous)

1. SUPERVISING STATION: NONE — 2. REPORTS MONITORED BY: —

3. NO. OF CERTIFICATED OBSERVERS: PAID — COOPERATIVE —

4. FEE (Each report)	DAY	NIGHT	SPECIAL OR IRREGULAR
SYNOPTIC	—	—	—
AVIATION	—	—	—
	—	—	—
5. COOPERATOR (SAWRS, AC, SC)	—	—	—

VIII. MISCELLANEOUS (General)

1. LOCATION OF OFFICE: GEOGRAPHIC SOUTH POLE

2. MAILING ADDRESS: U.S.WEATHER BUREAU, POLAR OPERATIONS PROJECT, WASHINGTON, D.C.

3. ANNUAL EXPENDITURES FOR CONTINUING SERVICES (ITEMIZED): NONE

4. STORM WARNINGS DISPLAYED: YES / NO

IX. REMARKS

ANTARCTIC CODE MANUAL USED IN CODING 3 AND 6 HOURLY REPORTS.
SPECIALS TAKEN DURING FLYING OPERATIONS WHEN CEILING 1000' or less and VISIBILITY 3 MILES OR LESS. DURING DARK PERIOD ONLY 00Z Rs TAKEN.
NAVY TRANSMITS ALL WEATHER MESSAGES TO NAF MCMURDO SOUND VIA RATTY OR CW.

X. PREPARED BY: HARRY R. SPOHN — TITLE: SUPERVISORY METEOROLOGICAL TECHNICIAN

STATION: AMUNDSEN-SCOTT, SOUTH POLE, ANTARCTICA — DATE: AUG. 1, 1963

WB FORM 500-3 (7-61) — USCOMM-WB-DC

BEST AVAILABLE COPY

M E M O R A N D U M

To : CHIEF, Polar Operations Project,
U. S. Weather Bureau, Washington 25, D.C.

September 28, 1963

From : Harry R. Spohn, Supervisory Metech,
South Pole Station, Antarctica
(Through MIC) C.E. Kobetz

Subject: Station Documentation

Reference: Weather Bureau Manual Volume III, Chapter E-10

Enclosed are the following Forms for this Station -

Camp Layout diagram with Met. spaces in red color
Scale drawings of Met. spaces
Station History
Station Information
Station Description & Instrumentation, sections 1 through 13
Current visibility marker chart

Briefly, the following changes occurred at this Station during 1962-63 which are reflected in the enclosed documents.....

Shallow thermohms,(-5,-10,-15,-25,-50 cm), readings discontinued 12/4/62 when wires accidentally cut by construction crew. Correct wire needed to put program back in operation not on hand.

Entire Radiation program discontinued 1/1/63

Frigorimeter became inoperative 3/63 when transformer burned out during period of numerous camp power failures

Pibal area in Heater Room adjacent to Inflation bldg was removed 3/63 to cut down on space heated by single Preway stove. There are no Pibal facilities at this time.

Rawinsonde program cut to scheduled 00Z daily upon departure summer support personnel 2/63. Beginning March 21, Radiometersondes flown every third day during Winter. Special flights were flown at 12Z during April for support of Byrd Station Trail-party and again September for Navy's Capetown-McMurdo Flight. Ozonesondes would not calibrate properly so program terminated.

B&W Net Radiometer installed before onset of Winter to aid in cloud-detection during dark period.

Visibility chart shows location of VLF facilities installed 1/63 that serve as useful visibility guides in addition to sites that have previously been used.

Harry R. Spohn

ROUTING
- [ ] Director
- [ ] Dep. Direc.
- [ ] Science Adv.
- [ ] Digital Sys.
- [ ] ~~Proj. Coord.~~
- [ ] Personnel
- [ ] Data Mgmt.
- [ ] Adm. Ops.
- [ ] Syn. Clim.
- [ ] Data Red.
- [ ] Clim. Anal.
- [x] Clim. Info.
- [ ] Climatography
- [ ] Data Ver.
- [ ] .....
- [ ] .....
- [ ] .....
- [ ] Info
- [ ] .....

Make copies for CAS + DVS

Enclosures
File

Form WBAN 10 D (9-60)

WB FORM 500-10
SECTION I

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

(WEATHER OBSERVATIONS)

Station (Name, State; Airport, if any): Amundsen - Scott South Pole Station

Type: WBO

Location (Name of building, street, etc.): South(grid)end of Messhall Bldg.

Prepared for close of: (Month and year) 31 December 1965

Reason for rendition (Check one or more)

X	Annual rendition		Relocation of instrument(s)
	New station	X	Change, or
	Station relocation		Correction of data

Latitude: 90 South

Longitude: - ° -

Local standard time (in use at land stations): 180 th mer.

Hours to convert to GCT: Add - Subtract 12

1. TIME OF OBSERVATION (other than aviation, 3- and 6-hourlies, radar and upper-air)

			Local standard time
	SN OW		
X	~~Soil~~ temperature	Soil moisture	0900
	Thickness of ice on water		
	Frozen ground layer		
	River stage		
	Climatological		
	Evaporation		
	Other (Specify) See attached sheet		Hrly

2. ELEVATION AND DATE ESTABLISHED

Elevation	Feet (MSL)	Date
~~#####~~ (H) SNOW SFC.	9186	7 Jan 57
Field (H_a)		
Station (H_p)	9186	7 Jan 57
Barometer (H_z)	9186	7 Jan 57
Climatological Station (H_{pc})		

3. INSTRUMENTATION (Location and exposure)

	Instrument (X = in use, S = standby)	Type	Height above ground or sea (ft.)	From Location	Nearest obstruction	Distance and direction to obstruction	Height of obstruction above instrument	Date commissioned present exposure
X	Direct reading wind equipment	Aerovane	27	250'N	Radome	250'S		Dec. 57
	Other wind equipment							
X	Wind recorder for direct reading equipment	Aerovane						Mar. 57
	Maximum and minimum thermometers							
	Psychrometer / Dew cell							
	Hygrothermometer / Infra red hygrometer							
	Telepsychrograph							
	Thermograph / Hygro-thermograph							
X	Remote reading thermometer	Aspirated Thermohm		250'N				Dec. 57
X	Subsurface Thermohm	Constantan		250'N				Dec. 57
	8-inch raingage / Shielded							
	Weighing raingage / Shielded							
	Tipping bucket raingage / Shielded							
	AMOS							
X	Barograph 5 Day	Belfort	9186					Mar. 65
X	Precision aneroid	Kollsman	9186					Jan. 57
X	Altimeter setting indicator	Kollsman	9186					Jan. 57
	Sunshine switch							
	Triple register / Multiple recorder							
	Solar radiation							
	Pilot balloon							
X	Rawinsonde / Radiosonde	GMD - 1A	15					Mar. 57

No. of station barometer 530 Sum of corrections -.009 1961

	Instrument	Type	Baseline (ft.)	Date commissioned
	Ceilometer (1)			
	Ceilometer (2)			
X	Ceiling light	CNE100	NOT in	use
	Transmissometer (1)			
	Transmissometer (2)			

RADAR →	Type:	Owned by:	
	Wavelength	Antenna size	Date comm.
RIVER GAGE →	Type:	River:	
	Flood stage ft.	Elev. of zero of gage ft.	Date comm.

4. Remarks and description of station exposure (Continue on separate 8" x 10 1/2" sheet, if necessary)

GENTLE rolling snow surface with constantly changing low profile sastrugi. Snow drifts in the station complex. Prevailing surface winds from NNE. Direction based on Grid System Greenwich Merdian used as North.

Prepared by (Signature)	Title	Station
Charlie D. Mabe	Supervisory Met. Tech	South Pole Station, Antarctia

USCOMM-WB-DC

AMUNDSEN-SCOTT, ANT.

SUPPLEMENTAL SHEET

Heights and depths of Thermohms surveyed 4 Dec .1965

and revaluated as follows, Hourly recordings.

Aspirated Thermohm

+ 38.3 Ft.

+23.8 Ft.

~~+~~ 6.5 Ft.

Subsurface Thermohm

- 7.3 Ft.

- 8.9 Ft.

- 10.5 Ft.

Inflation Shelter -

New above surface , inflation constructed Feb. 1965. New inflation complex placed in exact location of old below surface facility

No change in location.

WB Form 500-1

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

RENDITION: ( ) Original;
(X) Supplement No. ____

OFFICE PREPARING FORM AMUNDSEN*SCOTT

STATION AMUNDSEN-SCOTT COUNTY SOUTH POLE STATE ANTARCTICA INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED 31 Dec.1965

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_b)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	No change	WBO	1/7/57	Present		90° S		9186	9186	9186

ELEVATION ABOVE ~~GROUND~~ SNOW SURFACE

WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER	RAIN GAGES					REMARKS (Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
				TIPPING BUCKET	WEIGHING	8 INCH	(s)	(t)	
(l)	(m)	(n)	(o)	(p)	(q)	(r)			(u)
1									
1	NONE	NONE*	NONE						
*	Thermohms Only								Heights resurvey 4 Dec 1965.

REMARKS CONTINUED:

WB Form 500-1

WB Form 500-1
(4-61)

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

OFFICE PREPARING FORM AMUNDSEN-SCOTT

RENDITION: ( ) Original;
(X) Supplement No. 12

STATION AMUNDSEN-SCOTT XXXXX COUNTY SOUTH POLE XXXXX STATE ANTARCTICA INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED 1 December 1968

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_p)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	NO CHANGE	WBO	1/7/57							

NUMBER OF LOCATION	ELEVATION ABOVE GROUND							BAR.		REMARKS (Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
	WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER*	RAIN GAGES: TIPPING BUCKET	RAIN GAGES: WEIGHING	RAIN GAGES: 8 INCH			
(a)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
1a	33									Areovane raised from ~~22~~ 27.5 feet to 33.75 feet due to change in surface from drifting snow.
1b										Barometer removed from wea. sta. wall and placed on wooden plank inserted into floor and frozen beneath surface under floor independent of building movement.

REMARKS CONTINUED:

WB FORM 500-10
SECTION I

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

(WEATHER OBSERVATIONS)

Station *(Name, State; Airport, if any)*: AMUNDSEN-SCOTT

Type: WBO

Location *(Name of building, street, etc.)*:

Latitude: 90° 0 S

Longitude: °

Local standard time *(in use at land stations)*: 180 th mer.

Hours to convert to GCT: Add _____ Subtract ~~12~~

Prepared for close of: *(Month and year)* FEBRUARY, 1969

Reason for rendition *(Check one or more)*

	Annual rendition	X	Relocation of instrument
	New station		Change, or
	Station relocation		Correction of data

1. TIME OF OBSERVATION *(other than aviation, 3- and 6-hourlies, radar and upper-air)*

	Local standard time
Soil temperature / Soil moisture	
Thickness of ice on water	
Frozen ground layer	
River stage	
Climatological	
Evaporation	
Other *(Specify)*	

2. ELEVATION AND DATE ESTABLISHED

Elevation	Feet *(MSL)*	Date
~~Ground~~ (H) Snow/Ice Cap	9186	12/31/67
Field (H_a)	"	1/75/57
Station (H_p)	"	"
Barometer (H_z)	"	"
Climatological Station (H_{pc})	"	"

3. INSTRUMENTATION *(Location and exposure)*

	Instrument (X = in use, S = standby)	Type	Height above ~~snow~~ sea (ft.)	Location	Nearest obstruction	Distance and direction to obstruction	Height of obstruction above instrument	Date commissioned present exposure
X	Direct reading wind equipment	Aerovane	28	270°N	None			1/9/57
	Other wind equipment							~~XX/XX~~
X	Wind recorder for direct reading equipment	Bendix-Friez						1/9/57
X	~~XXXX~~ and minimum thermometers	H-B red liquid	6	245°N	Snow melter	275°S	0	12/27/66
	Psychrometer / Dew cell							
	Hygrothermometer / Infra red hygrometer							
	Telepsychrograph							
	Thermograph / Hygro-thermograph							
X	Remote reading thermometer	Aspirated thermohm L&N	8	270°N	Snow melter	300°S	0	12/31/67
	8-inch raingage / Shielded							
	Weighing raingage / Shielded							
	Tipping bucket raingage / Shielded							
	AMOS							
X	Barograph 4 Day	Belfort	9186					1/9/57
X	Precision aneroid	Kollsman	"					1/9/57
X	Altimeter setting indicator	Kollsman	"					1/9/57
X	Sunshine ~~switch~~ Recorder	Campbell-Stokes	3	500°NE	Harrington	20°S	3°	9/14/64
	Triple register / Multiple recorder							
X	Solar radiation	Eppley&Csiro	4	500°NE	Harrington	20°S	2°	9/14/64
X	Pilot balloon		0	overhead				8/15/59
X	Rawinsonde / Radiosonde	GMD-1A	15 ↑	overhead				3/27/57
								1/8/68

No. of station barometer 49-64 Sum of corrections ±.005

Instrument	Type	Baseline (ft.)	Date commissioned
Ceilometer (1)			
Ceilometer (2)			
Ceiling light #Lost sometime in 1966/1967			
Transmissometer (1)			
Transmissometer (2)			

RADAR → Type: / Wavelength / Antenna size / Owned by: / Date comm.

RIVER GAGE → Type: / River: / Flood stage ft. / Elev. of zero of gage ft. / Date comm.

4. Remarks and description of station exposure *(Continue on separate 8" x 10 1/2" sheet, if necessary)*: †GMD-1A raised approx. 8 1/2° to avoid limiting angles caused by surrounding structures and drifting snow.

Prepared by *(Signature)*	Title	Station
Roger E. Nesbit	SMT	AMUNDSEN-SCOTT

USCOMM-WB-DC

WB Form 500-1
(4-61)

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

RENDITION: ( ) Original;
(X) Supplement No. 13

OFFICE PREPARING FORM AMUNDSEN-SCOTT

STATION AMUNDSEN-SCOTT ~~XXXXX~~ SOUTH POLE ~~XXXXX~~ ANTARCTICA

INTERNATIONAL INDEX NUMBER 89009

DATE PREPARED FEB 10,1969

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_p)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	No Change	WBO	1/7/57							

NUMBER OF LOCATION	ELEVATION ABOVE GROUND							GMD1A		REMARKS (Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
	WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER*	RAIN GAGES: TIPPING BUCKET	RAIN GAGES: WEIGHING	RAIN GAGES: 8 INCH			
(a)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
										ONE HALF GMD 1A RAISED APPROXIMATELY EIGHT AND ~~XXXX~~ FEET BY NAVY CONSTRUCTION CREW. THIS MOVE EXECUTED TO AVOID LIMITING ANGLES CAUSED BY DRIFTING SNOW ACCUMULATING AROUND GMD DOME AND OTHER MAN-MADE STRUCTURES. ~~ALSO~~ RAISED TO AVOID ANY NEW SURFACE STRUCTURES ERECTED SUCH AS THE NEW STATION GENERATOR BUILDING. THE AREA UNDER THE GMD IS A ~~ROOM~~ 24' SQUARE AND APPROXIMATELY 8' HIGH. THIS AREA WILL BE UTILIZED FOR WORK SHOP AND STORRAGE. ATTACHED ARE PHOTOGRAPHS OF THE ROOM AND GMD DOME.

REMARKS CONTINUED: ALL OTHER ENTRIES ON SUPPLEMENT 12 SAME.

*

Form WBAN 10 D (12-66)

WB FORM 500-10
SECTION I

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

(WEATHER OBSERVATIONS)

Station (Name, State, Airport, if any): Amundsen-Scott South Pole Station — Type: WBO

Location (Name of building, street, etc.): Mess Hall/ WB Office

Latitude: 90 ° 00 ' — Longitude: ___ ° ___ '

Prepared for close of: (Month and year) 10/72

Local standard time (in use at land stations) _____ th mer. — Hours to convert to GMT: Add _____ Subtract 12 hrs.

Reason for rendition (Check one or more)

X	Annual rendition		Relocation of instrument(s)
	New station	X	Change, or
	Station relocation		Correction of data

1. TIME OF OBSERVATION (other than aviation, 3- and 6-hourlies, radar and upper-air)

	Local standard time
Soil temperature / Soil moisture	
Thickness of ice on water	
Frozen ground layer	
River stage	
Climatological	
Evaporation	
Other (Specify)	

2. ELEVATION AND DATE ESTABLISHED

Elevation	Feet (MSL)	Date
~~Ground (II)~~ Ice Cap	9186*	10/18/72
Field (H_a)	"	1/7/57
Station (H_p)	"	"
Barometer (H_z)	"	"
Climatological Station (H_{pc})	"	"

3. INSTRUMENTATION (Location and exposure)

	Instrument (X = in use, S = standby)	~~WB Stock number (See Instrumental Catalog)~~ Type	Height above ~~ground or~~ SNOW (ft)	Location	Nearest obstruction	Distance and direction to obstruction	Height of obstruction above instrument	Date commissioned present exposure
X	Direct reading wind equipment	Aerovane	27'	270° N	None			1/9/57
	Other wind equipment							
X	Wind recorder for direct reading equipment	Bendix-Friez Mod 141-4						1/9/57
	Maximum and minimum thermometers							
	Psychrometer / Dew cell							
	Hygrothermometer / Infra red hygrometer							
	Telepsychrograph							
	Thermograph / Hygro-thermograph							
	Remote reading thermometer							
X	Aspirated thermohm	L&M 100 Ohm	5'	270° N	Snow Melter	300'S	0	12/31/67
	8-inch raingage / Shielded							
	Weighing raingage / Shielded							
	Tipping bucket raingage / Shielded							
	AMOS							
X	Barograph	Belford 4-day	9186*					1/9/57
X	Precision aneroid	Kollsman	"					"
X	Altimeter setting indicator	Kollsman	"					"
X	Sunshine switch Recorder	Campbell-Stokes	5'	780' N	Radiation Hut	50'SW	6'	9/22/70
	Multiple recorder							
	Solar radiation							
X	Pilot balloon		0	ovhd				
X	Rawinsonde / Radiosonde	GMD-1B	4'	ovhd				3/27/57

No. of station barometer 49-64 Sum of corrections +.005

Instrument	Type	Baseline (ft.)	Date commissioned
Ceilometer (1)			
Ceilometer (2)			
Ceiling light			
Transmissometer (1)			
Transmissometer (2)			
RVR Computer (1)			
RVR Computer (2)			

RADAR →	Type:	Owned by:
	Repeater location:	
AUTOMATIC PICTURE TRANS. →	☐ Receiver Type: ☐ Remote Rcdr.	
	Remoted from:	
RIVER GAGE →	Type:	River:
	Flood Stage ft.	Elev. of zero of gage ft.
TIDE GAGE (Recorders in WB Stas.)	Recorder type:	
	Type:	Owned By:

4. Remarks and description of station exposure (Continue on separate 8" x 10½" sheet, if necessary)

* Average height 100 - mile radius.
Gentle rolling snow surface with constantly changing low profile sustrugi. The snow depth increases approximately 6 inches per year. Prevailing wind is NNE at 13 mph (1957-71). Zero degree meridian is designated as north.

Prepared by (Signature): Edward A. Jessup — Title: MIC — Station: Amundsen-Scott

Place "√" in this column to indicate a change

WS FORM A-1
SECTION I

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION DESCRIPTION AND INSTRUMENTATION

(WEATHER OBSERVATIONS)

Station *(Name, State, Airport, if any)*: Amundsen Scott South Pole Station — Type: WBO

Location *(Name of building, street, etc.)*: Mess Hall/ Weather Bureau Office

Latitude 90 ° 00'S — Longitude --- ° ---

Local standard time *(in use at land stations)* 180 th mer. — Hours to convert to GMT: Add _____ Subtract 12 hrs.

Prepared for close of: *(Month and year)* 10/73

Reason for rendition *(Check one or more)*

X	Annual rendition		Relocation of instrument(s)
	New station	X	Change, or
	Station relocation	X	Correction of data

1. TIME OF OBSERVATION *(other than aviation, 3- and 6-hourlies, radar and upper-air)*

Local standard time

	Soil temperature		Soil moisture
	Thickness of ice on water		
	Frozen ground layer		
	River stage		
	Climatological		
	Evaporation		
	Other *(Specify)*		

1 PBY
2 LCD
3 SFC
4 AB

2. ELEVATION AND DATE ESTABLISHED

Elevation	Feet *(MSL)*	Date
~~Ground (Ha)~~ Snow/Ice Cap	9186*	1/7/57
Field (H_a),	"	"
Station (H_p)	"	"
Barometer (H_z)	"	"
Climatological Station (H_{pc})	"	"

3. INSTRUMENTATION *(Location and exposure)*

		Instrument (X = in use, S = standby)	TYPE ~~WB Stock number~~ (See Instrumental Catalog)	Height above ~~ground~~ XXXXX Snow	Location	Nearest obstruction	Distance and direction to obstruction	Height of obstruction above instrument	Date commissioned present exposure
√	X	Direct reading wind equipment	Aerovane	26'	270° N	None			1/09/57
		Other wind equipment							
	X	Wind recorder for direct reading equipment	Bendix - Friez Model 141 - 4						1/09/57
		Maximum and minimum thermometers							
		Psychrometer / Dew cell							
		Hygrothermometer / Infra red hygrometer							
		Telepsychrometer							
		Thermograph / Hygro-thermograph							
		Remote reading thermometer							
√		Aspirated Thermohm	L&N 100 Ohm Cu	4'	270° N	Snow melter	300'S	0'	12/31/67
		8-inch raingage / Shielded							
		Weighing raingage / Shielded							
		Tipping bucket raingage / Shielded							
		AMOS							
	X	Barograph	Belford 4 Day	9186*					01/09/57
	X	Precision aneroid	Kollsman	"					"
	X	Altimeter setting indicator	Kollsman	"					"
√	X	Sunshine ~~switch~~ recorder	Campbell Stokes	4.5'	780° ne	Radiation Hut	50' SW	2'	09/22/70
		Multiple recorder							
		Solar radiation							
	X	Pilot balloon		0'	Ovhd.				
√	X	Rawinsonde / X Radiosonde	GMD # 1B	0'	Ovhd.				03/27/57

No. of station barometer 49-64 Sum of corrections +.005

Instrument	Type	Baseline (ft.)	Date commissioned
Ceilometer (1)			
Ceilometer (2)			
Ceiling light			
Transmissometer (1)			
Transmissometer (2)			
RVR Computer (1)			
RVR Computer (2)			

RADAR → Type: Owned by: Repeater location:

AUTOMATIC PICTURE TRANS. → ☐ Receiver ☐ Remote Rcdr. Type: Remoted from:

RIVER GAGE → Type: River: Flood Stage ft. Elev. of zero of gage ft.

TIDE GAGE (Recorders in WS Stas.) → Recorder type: Type: Owned By:

4. Remarks and description of station exposure *(Continue on separate 8" x 10½" sheet, if necessary)*

* Average height for a 100 mile radius.

Prepared by *(Signature)*: Bruce D. Webster — Title: MIC — Station: Amundsen - Scott

Continuation of 4. : Remarks and description of station exposure

Station located on a gentle rolling snow surface with constantly changing low profile sastrugi. Snow drifts generally oriented NNE - SSW. Snow depth increases approximately six inches per year. Prevailing wind direction is NNE at 13 mph. The 0 degree meridian is designated as North.

[redacted]

WB FORM A-1 (7-69) (FORMERLY 500-10) (PRES. BY WBOM A-11)

U.S. DEPARTMENT OF COMMERCE
ESSA
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

Station: Amundsen Scott South Pole Station

Prepared by (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

Reason for rendition: Annual, Change

Effective date: 10/31/73

Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
IIA-1a,b,c		

Section IIA - AIR TEMPERATURE AND HUMIDITY MEASURING AND RECORDING EQUIPMENT

1. Shelters (Repeat data in items a through c for each shelter)

a. Indicate for each type (large, medium, small, other) the direction and distance from office

Large	Medium	Small	Hygrothermometer, etc. (Spec.)
			Aspirated Thermohm on wind mast tower 270 ft north

b. Height of floor (in whole feet) for each type

	Large	Medium	Small	Hygrothermometer, etc. (Spec.)
Above ~~snow~~ snow				4 ft.
Above roof				

c. Is shelter lighted? (Check one box for each type)

Large	Medium	Small	Hygrothermometer, etc. (Spec.)
☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☒ No

Instruments

d. Indicate instruments and shelter location or other location of each

Instrument	Large	Med.	Small	Other	Instrument	Large	Med.	Small	Other
(X) In use: Telepsychrometer Type ____					Telethermometer				
					Telethermoscope				
Hygrothermometer Type ____ (WB Stock Number)					Telethermograph				
(S) Stand by only: Dewcel hygrometer					Thermographs				
					Thermometers (or indicators) Maximum		S		
Hygrothermograph					Minimum		S		
					Dry bulb		S		
Hygrograph					Wet bulb				
Psychrometer aspirated by: Motor driven fan					Dew point				
Hand-driven fan					Other instruments (Specify) Sfc. temp.				X
Whirling mechanism: Hand-crank					Aspirated thermohm Cu Connected to Speedomax G				
Sling		S			in WBO.				

e. Are maximum and minimum thermometers mounted on a separate post? ☐ Yes ☒ No

2. Describe and give location of nearby objects which affect temperature and humidity values, e.g., building, chimneys, trees, pavement, evaporative coolers, steam vents, etc. For ground installations, indicate nature of surface material under and around shelter or support (sod, gravel, etc.) (If more space is needed, continue on reverse.)

Generally flat snow surface around instrument exposure area which is up wind from any obstruction or buildings.

Section IIB - SOIL OR WATER TEMPERATURE MEASURING AND RECORDING EQUIPMENT

1. Method of measurement, type of indicator, recorder, etc.	2. Depth(s) at which temperature is measured (Indicate unit, e.g., cm, ft., in.)

3. Describe surface of soil (type of soil and soil cover), drainage, direction and degree of slope, shade, etc., of plot. For water temperature, describe area where measurements are made. (If more space is needed, continue on reverse).

4. Temperature measured: ☐ Soil ☐ Water

WB FORM A-1 (7-69) (FORMERLY 500-10) (PRES. BY WBOM)

U.S. DEPARTMENT OF COMMERCE
ESSA
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

Station: Amundsen Scott South Pole Station

Prepared by (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

REASON FOR RENDITION: Annual, change — Effective date: 10/31/73

Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
III # 1		

Section III - CEILING MEASURING AND RECORDING EQUIPMENT

1. Balloons (ceiling) (Check) ☐ 10-Gram ☐ 30-Gram

2. Ceiling light

a. Make: ~~Xxxx~~ No ceiling light in use — b. Model or type:

c. Diameter (Inches)	Cover glass	Primary reflector	Secondary reflector

d. Cable	Length (Feet)	Gage	Conductors	Type

e. Lamp	Volts	Watts	Type (No.)	Base type

f. Location (Distance and direction from office)

Projector	Observation point

g. Length of baseline (feet)

h. Elevation of observation point (msl) ft.

3. Ceilometer

a. Projector

Make	Elevation of trunions (msl) ft.	Type of lamp	Location with respect to office
Fixed beam			
Rotating beam			

b. Detector

Make	Elevation of trunions (msl) ft.	Baseline (ft.)	Location with respect to office
Fixed beam			
Rotating beam			

c. 2nd detector

Rotating beam			

d. Recorder

Make	Type
Fixed beam	
Rotating beam	

4. Attach drawing of location of separate accessory items such as control switches, relays, fuses, marktime switches magnetic contactors, etc., and location of cable, conduit, etc. hidden in walls or underground **OR** check box and **ENTER** date. (Not required if "As Built" drawings in RH.) ☐ No change in previous drawings dated

Section IV - VISIBILITY CHARTS AND EQUIPMENT

1. Stations reporting visibility will submit with this page two visibility charts, Sections IV-A and IV-B showing all markers throughout the entire range of visible objects. Include the location of any control tower from which visibility observations are taken. (Use FMH #1, Chapter A6-3.2 for a guide.) **OR** check box and **ENTER** date.

☒ No change in Sections IV-A and IV-B dated 10/31/71

2. Transmissometer(s)

Instrument Number	Runway(s) Served	System owned by	RVR or RVV	Baseline

3. For WB owned equipment, attach drawings of location of separate accessory items and location of cable, conduit, etc. hidden in walls or underground. **OR** check box and **ENTER** date. ☐ No change in previous drawings dated

[redacted]

WB FORM A-1 (8-70) (PRES. BY WBOM A-11)

U.S. DEPARTMENT OF COMMERCE
ESSA
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

Station: Amundsen Scott South Pole Station

Prepared by (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

Reason for rendition: Annual, Change

Effective date: 10/31/73

Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
V.-1 (b,c,d) V.-2 (b,d)		

Section V - WIND MEASURING AND RECORDING EQUIPMENT (Submit data as follows for each installation under items 1 and 2)

1. Wind system (Direct reading)

a. Check which
- ☐ F420 ☐ F431
- ☒ Other (Specify) Bendix-Friez Aerovane

b. Height of rotor above		c. Height of vane above	
~~Ground~~ (Ft.)	Roof (Ft.)	~~Ground~~ (Ft.)	Roof (Ft.)
snow 26		snow 26	

d. Number and location of repeator indicators in system

One parallel recorder in galley

Number of magnetic amplifiers in system _____

e. Recorder (Check which)
- ☐ F311 ☐ F312 ☐ F313 ☐ F315
- ☒ Other (Specify) Bendix-Friez Aerovane

Chart No. 516993JB

f. Cable	Length (Ft.)	Gage	Conductors
	300	13	7

g. Location of rotor and vane

On steel mast 270 ft. north of Weather Bureau Office

h. Owner of system, or components (Specify Weather Bureau, FAA, etc.)

NWS

i. Orientation check points

Object	Direction
Object	Direction

2. Wind system composed of

a. Anemometer (Check which)
- ☐ F103 ☐ F102 ☒ Other (Specify) Bendix-Friez Aerovane

b. Height of rotor above: ~~Ground~~ (Ft.) snow 26; Roof (Ft.)

c. Wind vane (Check which)
- ☐ F010 ☐ F011 ☒ Other (Specify) Bendix-Friez Aerovane

d. Height of vane above: ~~Ground~~ (Ft.) snow 26; Roof (Ft.)

e. Indicator (Check which)
- ☐ F221 ☐ F221A ☒ Other (Specify) Bendix-Friez Aerovane Mod. 510083-1

f. Cable	Length (Ft.)	Gage	Conductors
	300	13	7

g. Location of rotor and vane

On steel mast 270 ft. north of Weather Bureau Office

h. Owner of system, or components (Specify Weather Bureau, FAA, etc.)

NWS

i. Orientation check points

Object	Direction
N-S grid	
Object	Direction

3. Attach drawing *of location of cable or conduit connecting the sensing elements to the indicators, power source, etc.,* and the location of objects suspected of causing nonrepresentative speed or direction values **OR**check box and **ENTER** date. Italicized portion not required if 'As Built' drawings in RH.

☒ No change in previous drawings dated 8/01/63

Section VI - SUNSHINE DURATION EQUIPMENT

1. ~~Switch~~ npt a switch

a. Type (Check which)
- ☐ Photoelectric ☒ Other (Specify) C.F. Casella Glass Sphere

b. Location: 780 ft. NE WBO

2. Recorder

a. Make: Campbell Stokes

b. Type: Sunshine Recorder

WB FORM A-1 (9-70) (PRES. BY WBOM A-11) FORMERLY WB FORM 500-10

U.S. DEPARTMENT OF COMMERCE
ESSA
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

Station: Amundsen Scott South Pole Station

Prepared by *(Name, title, station and date)*: Bruce D. Webster (MIC) Amundsen Scott 10/31/73

REASON FOR RENDITION: Annual

Effective date: 10/31/73

Change of items *(Specify)*	Correction of items *(Specify)*	Relocation of instruments *(Specify and give distance and location from previous location)*

Section VII - PRECIPITATION MEASURING AND RECORDING EQUIPMENT

1. Eight-inch non-recording gage
- a. Top of gage above: Ground (Ft.) | Roof (Ft.)
- b. Shielded: ☐ Yes ☐ No

2. Tipping-bucket gage
- a. Make
- b. Top of gage above: Ground (Ft.) | Roof (Ft.)
- c. Shielded: ☐ Yes ☐ No

3. Weighing-type, recording gage
- a. Make
- b. Model
- c. Traverse: ☐ Single ☐ Double ☐ Triple
- d. Capacity *(inches)*: ☐ 2.4 ☐ 6 ☐ 9 ☐ 12
- e. Gears *(hours)*: ☐ 6 ☐ 12 ☐ 24
- f. Chart No.
- g. Top of gage above: Ground (Ft.) | Roof (Ft.)
- h. Shielded: ☐ Yes ☐ No

4. Describe the installation of the gages telling location and height of local obstructions which might affect the catch (i.e., trees, buildings, overhead wires, etc.), and how the gages are anchored to the surface

Measurement of snowfall by gages is not attempted due to the difficulty in determining whether the snow is freshly fallen or was carried in by the wind.

5. List special equipment used such as towers, shields, snow gages, etc.

No change in previous drawings and attachments dated 10/18/72

6. Weighing-type scale (for water equivalent of snow) ☐ Yes ☐ No — Make

7. Attach drawings of wiring for the tipping-bucket gage, **OR** check box and **ENTER** date *(Not required if 'As Built' drawings in RH)* ☐ No change in previous drawings dated

Section VIII - MULTIPLE REGISTERS AND TOTALIZING INDICATORS

1.a. Register *(Check type)*: ☐ F315 ☐ M003 ☐ Triple register ☐ Other (Specify)

b. Totalizer panel: ☐ A230 ☐ A231 ☐ A232 ☐ Other (Specify)

2. Elements recorded *(Check each)*: ☐ Wind speed ☐ Wind direction ☐ Other *(Specify)* ☐ Rainfall ☐ Sunshine

3. Elements totalized *(Check one or more)*: ☐ None ☐ Sunshine ☐ Wind speed ☐ Rainfall

4. Storage battery
- a. Make
- b. Volts
- c. Ampere/hour capacity

5. Battery charger
- a. Make
- b. Type/model
- c. Volts
- d. Ampere/hour capacity

6. Selenium-rectifier-type power supply *(Check one)*: ☐ Yes ☐ No

7. Attach drawing of wiring for multiple register and totalizing indicators, **OR** check box and **ENTER** date. *(Not required if 'As Built' drawings in RH)* ☐ No change in previous drawings dated

[redacted]

WB FORM A-1 (7-69) (FORMERLY 500-10) (PRES. BY WBOM A-11)

U.S. DEPARTMENT OF COMMERCE
ESSA
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

Station: Amundsen Scott South Pole Station

Prepared by (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

Reason for rendition: Annual, Change

Effective date: 10/31/73

Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)

Section IX - PRESSURE MEASURING EQUIPMENT. All data on this page shall apply to the current location of instruments. (See the addendum to Circular N or Manual of Barometry for definitions and instructions relative to changes in barometer elevation.)

Part A - ELEVATION DATA PERTAINING TO THE MERCURIAL STATION BAROMETER

Description of data — Item	Elevation in feet and hundredths	Authority (Agency or title of Surveyor)	Form or publication giving survey information	Date of form (or survey)
1. Elevation of reference plane above mean sea level				
2. Elevation of fixed point above mean sea level				
3. Elevation of ivory (or zero) point of barometer, H_z, above mean sea level	9186.35	MIC		1/57

4. Describe and identify fixed point

5. Describe and identify reference plane

Part B - MERCURIAL BAROMETER DATA

Barometer data	Station barometer	Extra barometer
1. Barometer serial number	49-64	
2. Scale range ☒ In. ☐ Mb. — From	17.8	
2. Scale range ☒ In. ☐ Mb. — To	32.7	
3. Cistern type (adjustable or fixed)	adjust	
4. Elevation of ivory (or zero) point, ft. (MSL)		9186
11. Latitude 90° 00' ☐ N ☒ S		
12. Assigned station elevation H_p	Feet: 9186	
13. Field elevation H_a	9186	
14 Climatological station elev. H_{pc}	9186	
15. Normal annual temperature (1957-1972)	-57 °F	
16. Mean annual pressure at barometer elevation, H_z, (enter to nearest 0.01 in. H_g) (1957-1971)	20.12	

Barometer corrections ☒ In. ☐ Mb.	Station barometer	Extra barometer
5. For scale errors and capillarity	+.005	
6. For gravity	See reverse side	
7. Removal correction (reduction from H_z to H_p)	.000	
8. Residual correction	none	
9. Sum of above corrections	+.005	
10. Variable removal correction used ☐ Yes ☒ No		

Part C - ANEROID BAROMETER

1. Type	2. Scale range	From	To
Kollsman	☐ In. ☒ Mb.	640	920

3. Elevation above mean sea level (to the nearest whole foot) 9186

Part D - BAROGRAPH

1. Type	2. Scale range	From	To
Belford	☒ In. ☐ Mb.	18.50	21.00

3. Gears (day): ☐ ¼ ☐ ½ ☐ 1 ☒ 4 ☐ 7

4. Type of mounting (rigid, felt, rubber, springs, etc.)	5. Elevation above mean sea level (to the nearest whole foot)
Rubber pad	9186

WB FORM A-1 SUPERSEDES WB FORM 500-10 WHICH MAY BE USED.

Part E - ALTIMETER SETTING INDICATOR

1. Make	2. Elevation range (Feet) From	2. Elevation range (Feet) To	3. Elevation above mean sea level (to the nearest whole foot)
Kollsman	6600	10,000	9186

Part F - Describe and give elevations of additional pressure instruments and explain unusual installations, i.e., use of static head connections to barometer cases, etc.

None

Part G - Specify any pressure instruments whose readings are significantly affected as a result of (1) wind, (2) high velocity air conditioning systems, (3) excessive vibration, (4) sudden temperature changes (5) direct rays of the sun, or (6) other causes, and indicate magnitude of effect, if known.

None

Part H - HISTORY OF PRESSURE OBSERVATIONS SINCE JANUARY 1, 1900

Date	Nature of change and location of station (Building, etc.)	Elevations (MSL, feet and hundredths) Barometer H_z	Station H_p
1/7/57	Mess hall/ Weather Bureau Office	9186.35	9186.35

Notes regarding revision of elevation records (Give original data, reason and authority for revision, and date of revision)

Mr Edwin Flowers, the MIC in 1957, stated in the first station history that the station elevation of 9186 feet was a conversion from a XXX calculated value of 2800 meters. Because the land area this far inland has not been surveyed, the elevation was undoubtedly calculated by averaging altimeter readings.

Part B. #6 For gravity: Gravity correction varies with observed pressure:
XXXXXXXXXX (0.001683551 x barometer reading)

WB FORM A-1 (7-70) (PRES. BY WBOM A-11) (FORMERLY WB FORM 500-10)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMIN.
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

STATION: Amundsen Scott South Pole Station

PREPARED BY (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

REASON FOR RENDITION: Annual, Change

EFFECTIVE DATE: 10/31/73

CHANGE OF ITEMS (Specify): X.-1(e) X.-2 (a,b,e)

CORRECTION OF ITEMS (Specify):

RELOCATION OF INSTRUMENTS (Specify and give distance and location from previous location):

Section X-WINDS ALOFT EQUIPMENT AND HISTORY

1. BALLOON INFLATION (Facilities)

A. INFLATION ROOM FOR	B. LOCATION (Check which) SEP. BLDG.	OFFICE BLDG.	OTHER (Specify)	C. LOCATION WITH RESPECT TO OFFICE AND RELEASE POINT
☐ PILOT ☐ RAOB				225 ft. east of WBO. Inflation building is point of release.
☒ COMBINATION	X			
☐ PILOT ☐ RAOB				

D. INSIDE DIMENSIONS	HEIGHT FEET	HEIGHT INCHES	WIDTH FEET	WIDTH INCHES	LENGTH FEET	LENGTH INCHES	E. HEATED YES	E. HEATED NO	IF "YES" BY WHAT METHOD
☐ PILOT ☐ RAOB ☒ COMBINATION	15	0	14	0	14	1	X		Internal furnace
☐ PILOT ☐ RAOB									
F. BALLOON EXIT(S) NUMBER 1	14	6	12	1					
NUMBER 2									

2. BALLOON INFLATION (Gas)

A. ☒ HELIUM ☐ HYDROGEN ☐ OTHER (Describe)

B. BOTTLED: ☒ YES ☐ NO — C. GENERATED: ☐ YES ☒ NO

(1) NUMBER OF CYLINDERS USED PER YEAR: 450
(2) NO. CYL. STORED AT ONE TIME: 450
(3) SUPPLIER: U.S. Navy
(4) COST PER CYL. (Incl. trans.):
(5) CYL. STORAGE (Location & brief description): Sub sfc. storage constructed Dec. 1972, extends 160 degrees from inflation Bldg. Dimensions: 50' x 12', cyl. capacity appr. 400 to 450

(1) NUMBER OF GENERATORS: *See
(2) TYPE: below
(3) CHEMICALS USED:
(4) AMOUNT OF CHEMICALS USED PER YEAR:
* Gill generator ~~partially dismantled/1973~~

D. PIPE LINE: ☐ YES ☒ NO ☐ HIGH PRESSURE ☐ LOW PRESSURE

E. CONDITIONING FACILITIES AVAILABLE: ☒ ELECTRIC "HOT PACK" CONDITIONER ☒ OTHER (Describe):
Diesel fuel oil treatment during dark period.

3. DESCRIBE ANY SPECIAL OR UNUSUAL FEATURES OF THE WINDS ALOFT PROGRAM

4. Historical winds-aloft observation record (from first location, or observational change, immediately prior to January 1, 1950)
Enter "P" for pibal, "RW", for rawin, and "RB" for rabal. If more than one type is made at a scheduled time, indicate predominant type. Once a complete history of observations has been recorded on this form, only the last entry of the previous form and subsequent changes need to be recorded preceded by this note: For previous record see form with effective date 10/18/72

PLACE OF OBSERVATION (Name of airport, building, etc.)	PERIOD OF OBSERVATIONS (Dates) FROM	TO	NO. OF OBS. DAILY	TIMES (GMT) AND TYPES OF OBSERVATIONS TIME	TYPE	TIME	TYPE	TIME	TYPE	TIME	TYPE
	For previous record see form with effective date 10/18/72										
Mess Building/ Weather Bureau Office	2/16/72	10/1/72	1	00	RW						
	10/02/72	02/16/73	2	00	RW	1200	RW				
	02/16/73	08/28/73	1	00	RW						
	08/28/73	09/05/73	2	00	RW	1200	RW				
	09/05/73	10/03/73	1	00	RW						
	10/04/73	10/31/73	2	00	RW	1200	RW				

WB FORM A-1 (7-69) (FORMERLY 500-10) (PRES. BY WBOM A-11)

U.S. DEPARTMENT OF COMMERCE ESSA WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

Station: Amundsen Scott South Pole Station

Prepared by (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

REASON FOR RENDITION: Annual, Change — Effective date: 10/31/73

Change of items (Specify)	Correction of items (Specify)	Relocation of instruments (Specify and give distance and location from previous location)
X.-4(d) X.-4(g) X.-5		

Section X - WINDS ALOFT EQUIPMENT AND HISTORY (Continued)

3. Pilot balloon equipment

a. Theodolite(s) (Complete these data for each)

	Make	Sep. wide angle Yes	Sep. wide angle No	Support: Adjust., anchored	Support: Tripod
(1)	Warren-Knight	X			X
(2)					

b. Theodolite platform(s) (Complete these data for each)

	Location with respect to office building	On tower, building, etc. (Specify)
(1)	Above Weather Bureau Office	On SE (grid) corner of radome platform
(2)		

	Wind break Yes	Wind break No	Height of sides (feet)	Type of construction
(1)		X		
(2)				

	Dome Yes	Dome No	Describe	Elevation of floor (meters and tenths): Above ~~ground~~ snow	Above mean sea level
(1)		X		0.0	2803.7
(2)					

c. Identify check point(s)

	Elevation angle	Azimuth angle
Site b (1) Top of flag pole at site of ceremonial South Pole	0.2 °	331.0 °
Site b (2) West(grid) side on top of wind mast	7.1 °	193.6 °

4. Rawinsonde equipment

a. Tracking equipment: ☐ SCR-658 ☐ GMD-1 ☐ GMD-2 ☒ GMD-1B ☐ GMD-1A ☐ WBRT-57 ☐ WBRT-60 ☐ GMD-R ☐ WBRT-R ☐ OTHER (Specify)

b. Location and distance from office building: Appr. 30 ft. above floor of Weather Office

c. Elev. of center of antenna (meters and tenths): Above ~~ground~~ snow 2.1; Above mean sea level 2805.8

d. Identify check point(s): Target antenna on top of inflation bldg.

Elevation angle 5.8 °; Azimuth angle 279.4 °

e. Type of shelter for tracking equipment and observer: Fiberglass radome

f. Is radome insulated? ☒ Yes ☐ No

g. Method of heating shelter: heating lamp and residual heat from WBO below.

h. Is forced ventilation used? ☐ Yes ☒ No

i. Describe ventilation system:

5. Intercommunication facilities

Check which

- ☐ Raob recorder to theodolite platform
- ☐ Raob recorder to rawinsonde equipment
- ☐ Raob recorder to instrument shelter
- ☒ Raob recorder to release area
- ☐ Theodolite platform to rawinsonde equipment
- ☐ Other (Explain)

WB FORM A-1 SUPERSEDES WB FORM 500-10 WHICH MAY BE USED.

WS FORM A-1 (10-70) (PRES. BY WSOM A-11)

U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL WEATHER SERVICE

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

STATION: Amundsen Scott South Pole Station

PREPARED BY (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

REASON FOR RENDITION: Annual, change

EFFECTIVE DATE: 10/31/73

CHANGE OF ITEMS (Specify): XI.-1 (a,b)-2(c) -5& 3(e) & (f)

CORRECTION OF ITEMS (Specify): XI.# 4 (all)

RELOCATION OF INSTRUMENTS (Specify and give distance and location from previous location):

SECTION XI - RADIOSONDE EQUIPMENT AND HISTORY

1. RECORDER

a. Make	b. Type	c. Length of cable (tracking set to recorder)
L & N	J-105	205 ft.

2. BASELINE CHECK BOX

a. Location with respect to recorder	b. Internal power supply	c. Type
Six ft. on opposite wall.	☐ Yes ☒ No	J202B Type III

3. ELEVATIONS

a. Source used to obtain raob surface temperatures: ☐ Telepsychrometer ☒ Other (specify) Aspirated thermohm to L & N Recorder ☐ Instrument shelter ☐ Hygrothermometer

	GPM & TENTHS	METERS & TENTHS
b. Elevation of station for raob purposes (above mean sea level) BASED ON (Check appropriate box):		2800.0
(1) Intake of hygrothermometer or telepsychrometer or floor of instrument shelter, or ☐ ☐		
(2) Release point established for station (floor or raob inflation shelter plus 4 feet (1.2 meter) ☒		
c. Station elevation (Hp)		2800.0
d. Elevation of table top where pressure-contact settings are made (above mean sea level)		2800.0
		MILLBARS&TENTHS
e. Correction applied to station pressure to obtain pressure-contact setting		= 0.8
f. Correction for difference between station pressure and surface pressure for raob purposes		-0.8

4. EMERGENCY POWER

a. Check one	b. Type	c. Owned by	d. Output (Kw) available to Weather Bureau	e. Phase	f. Voltage
☐ Yes ☒ No	☐ Gasoline ☐ Diesel			☐ Single ☐ 3-Phase	-------

5. Describe unusual aspects of installation, such as use of preamplifiers, remote control unit, time-share or on-station computer use, etc.

GMd-1B system is connected to a Honeywell Mini-computer.

L & N J-104 recorder is used for the radiometersonde program conducted by NOAA ERL.

6. Attached drawing showing the wiring between the power supply, tracking set, radiosonde recorder and related units. Show location of hidden cables, conduit, junction boxes, etc., OR check box and ENTER date. Not required if 'As Built' drawings in RH.

☐ See 'As Built'
☒ No change in previous drawings dated 10/01/61

7. Historical radiosonde observation record (from first location, or observational change, immediately prior to Jan. 1, 1950). Once a complete history of observations has been recorded on this form, only the last entry of the previous form and subsequent changes need be recorded preceded by this note. For previous record see form, effective date

PLACE OF OBSERVATION (Name of airport, building, etc.)	PERIOD OF OBSERVATION (Dates) FROM	THRU	NO. OF OBS. DAILY	TIME (GMT) OF OBSERVATIONS TIME	TIME	TIME	TIME
	For previous record see form, effective date 10/18/						
Mess Bldg./ Weather Bureau Office	02/16/72	10/01/72	1	00			
	10/02/72	02/16/73	2	00	12		
	02/16/73	08/28/73	1	00			
	08/28/73	09/05/73	2	00	12		
	09/05/73	10/03/73	1	00			
	10/04/73	10/31/73	2	00	12		

WS FORM A-1 SUPERSEDES PAGE 9, WB FORM A-1 (9-70) WHICH MAY BE USED UNTIL EXHAUSTED

WB FORM A-1 (9-70) (PRES. BY WBOM A-11) (FORMERLY WB FORM 500-10)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADM.
WEATHER BUREAU

STATION DESCRIPTION AND INSTRUMENTATION

REGIONAL HDQS. APPROVAL

STATION: Amundsen Scott South Pole Station

PREPARED BY (Name, title, station and date): Bruce D. Webster (MIC) Amundsen Scott 10/31/73

REASON FOR RENDITION: Annual, change

EFFECTIVE DATE: 10/31/73

CHANGE OF ITEMS (Specify)	CORRECTION OF ITEMS (Specify)	RELOCATION OF INSTRUMENTS (Specify and give distance and direction from previous location)

Section XIII - RADAR EQUIPMENT

1A. TYPE RADAR: NONE Available		B. WAVE LENGTH (cm)	C. ☐ NETWORK ☐ LOCAL USE
2. ANTENNA	A. LATITUDE	B. LONGITUDE	C. DISTANCE FROM OFFICE (cable run)
3. REPEATER INDICATORS	A. TYPE(S)		B. LOCATION
4. REMOTING	TRANSMITTER: ☐ Slo-scan ☐ Microwave ☐ Dial-in; a. Type (model) ____ b. Owned by ____ c. Maint'd. by ____		REMOTE INDICATORS: a. Type ____ b. Owned by ____ c. Location ____
5. CAMERA	A. TYPE(S)	B. USE	C. MOUNTED ON (Check one) ☐ PERMANENT ☐ REMOVABLE
			☐ PERMANENT ☐ REMOVABLE
6. AUXILIARY POWER SUPPLY	A. TYPE	B. CAPACITY	C. OWNER AND LOCATION

7. On polar coordinate paper (WB Form 610-2a) plot the azimuth angles and give the elevation angles of all objects within 100 nautical miles of the radar antenna site which intercept the center of the radar beam when the beam is projected horizontally at 0.0 antenna tilt. Use TA-610-0-1 to determine which objects intercept the center of the beam. Mark orientation checkpoint and describe; i.e., radio tower, building, etc. Attach diagram to this page OR check box and ENTER date:

☐ NO CHANGE IN PREVIOUS DIAGRAMS DATED _____.

8. DESCRIBE COMMUNICATION FACILITIES AND UNUSUAL FEATURES OF INSTALLATION OR OF OPERATING AND REPORTING PROCEDURES.

9. HISTORICAL RADAR OBSERVATION RECORD (From date of first observation)
List any prolonged outages and outages and dates. Show modifications and changes in models, etc.

PLACE OF OBSERVATION (Name, airport, building, etc.)	PERIOD OF OBSERVATIONS (dates) FROM	TO	MODEL OR TYPE	ANTENNA SIZE (Feet)	ANTENNA HEIGHT ABOVE GROUND (Feet) (Measured to center of parabolic reflector)

WS FORM A-3 Page 1 (10-70) Pres. by - WBOM A-11

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION INFORMATION

EFFECTIVE DATE OF LAST RENDITION	EFFECTIVE DATE
10/18/72	10/31/73

PURPOSE OF RENDITION: ANNUAL *- CHANGE

I. STATION NAME: Amundsen Scott/ South Pole | STATE: Antarctica | TYPE: WBO

NAME OF AIRPORT(S) (If applicable): | CALL LETTERS: NPX | INDEX NO.: 89009

II. SURFACE OBSERVATION - 1. Synoptic (Coded 3 - and 6 - Hourly)

a. TIME (GMT)

0000	X	0300	*	0600	X	0900	*
1200	X	1500	*	1800	X	2100	*

OBSERVATIONS MARKED * ARE REGULARLY MADE BY: NWS Observers
* Only during Aircraft operations OBSERVERS

OBSERVATIONS MARKED # CODED (From the Aviation Weather Reports) BY: STATION

b. SPECIAL GROUPS: See Antarctic Code Manual ADDED TO REPORTS

TAKEN AT (GMT): Same as II* 1a.

c. Reports entered on circuit No. at

2. Aviation

(1) SCHEDULED RECORD: 24 DAILY * | LESS THAN 24 DAILY X | LESS THAN 24 NOT DAILY
PLNS | SPECIALS | CHECKS | LOCALS X
*Only during Aircraft Operations

ENCODED FROM 3- AND 6- HOURLY REPORTS BY:

(2) UNSCHEDULED = ON CALL ONLY AS NEEDED BY: WS | OTHER AGENCY X

b. TIME (LST), RECORD OBSERVATIONS (When less than 24)

00 X	*	*02	03 *	*	*	06 *	*	09 *	*	*	
12 X	*	*14	15 *	*	*	18 *	*	21 *	*	*	

LOCAL TIME STAND.: EST * only during Aircraft Operations | BST | OTHER (Specify) 180th Meridian

OBSERVATIONS MARKED * TAKEN BY 2 NWS OBSERVERS

c. ELEMENTS OBSERVED:

				CEILING AND VISUAL ELEMENTS			
SEA LEVEL PRESSURE (sta)	X	TEMPERATURE	X	DEW-POINT		WIND	X
ALTIMETER SETTING	X	RNWY VSBY	X	RVR		REMARKS	X

d. CODED REMARKS & SP. DATA GROUPS APPENDED TO REPORTS AT:

GMT	0000	0300	0600	0900	1200	1500	1800	2100
app	X	*	X	*	X	*	X	*
RR	X	*	X	*	X	*	X	*
1SLPPP 8NsCHshs	X	*	X	*	X	*	X	*
$T_{n/x}T_{n/x}$	X				X			
$9S_pS_pS_pS_p$	X	*	X	*	X	*	X	*
$2R_{24}R_{24}R_{24}R_{24}$								

*: only during aircraft operations

e. TRANSMISSION ON WEATHER CIRCUITS: NONE X

RECORD OBSERVATIONS TRANSMITTED IN: REGULAR SEQUENCE COLLECTION | ASCAN PERIOD

ON CIRCUIT(S) NO. AT

3. SURFACE OBSERVATIONS RECORDED ON FORMS

MF1-10C		610-		B-15		B-16		612-		MF1-10A X	MF1-10B X
F-10	X	F-6		B-21		OTHER					E-15

III. UPPER-AIR OBSERVATIONS (GMT) Enter: R for RAOB, W for RAWIN, RW for Rawinsonde, P for Pibal, and LL for Low Level*

ELEV. FOR RAOB PURPOSES (GPM)		0000	X	0600		1200 RW	*	1800		IRREG.

IV. OTHER OBSERVATIONS (Indicate number scheduled per day when applicable)

CLIMATOLOGICAL	X	FRUIT-FROST		RADAR		WATER TEMPERATURE	
STATE		FROZEN GROUND LAY.		RIVER STAGE		SUNSHINE DURATION	X
SWELL		GAMMA RAY		SOIL TEMPERATURE		OTHER (Specify)	
EVAPORATION		ICE THICKNESS		SOLAR-RADIATION			
FIRE-WEATHER		OZONE		SOIL MOISTURE			
STORM WARNINGS DISPLAYED:				DAY & NIGHT		DAY ONLY	

PREPARED BY (Signature): Bruce D. Webster | TITLE: M/C

V. CONTINUOUS WEATHER WATCH OBSERVATIONS
(Enter 1 for WS Staff or 2 for WS Staff augmented by Air Force) → 1

VI. RIVER AND RAINFALL COLLECTION (Enter No. of stations reporting)

1. RIVER ONLY	DAILY		CRITERIA	
2. RAINFALL ONLY	DAILY		CRITERIA	
3. RIVER AND RAINFALL	DAILY		CRITERIA	

VII. SECOND-ORDER AND "COMBINED" TYPE STATIONS (Miscellaneous)

1. SUPERVISING STATION
2. REPORTS MONITORED BY
3. REPORTS TRANSMITTED TO (Station): McMurdo Station, Antarctica (Navy)

VIA: PHONE | RADIO X | TELEGRAPH | OTHER

COST: DAY EA. | NIGHT EA.

4. FEE (Each report)

	DAY	NIGHT	SPECIAL
SYNOPTIC			
AVIATION			

5. COOPERATOR

VIII. MISCELLANEOUS (General)

1. HOURS OF WS OPERATION (LST) (When less than 24 daily)

	FROM	TO	DAYS OF WEEK
0700	0700	2300	7
During Aircraft Operations			
	0000	0000	7

2. AREA POPULATION (Thousands): 22
3. ITINERANT AIRCRAFT OPN'S PER YEAR (Thousands): Estimated 200
4. FAA DROP ON CFW:

5. LOCATION OF OFFICE: Mess hall/ WBO

6. MAILING ADDRESS:
USARP, South Pole Station
FPO, San Francisco, California 96692

7. ANNUAL EXPENDITURES FOR CONTINUING SERVICES (Itemize)

REMARKS

III. 1200 GMT Rawinsonde required only during aircraft operations from Oct. through part of Feb.

*LOW LEVEL/AIR POLLUTION OBSERVATIONS SCHEDULED

STATION: Amundsen Scott South Pole Station | DATE: 10/31/73

WS FORM A-3 (10-70) Page 1
(Formerly WB Form 500-3)

SUPERSEDES WB FORM 500-3, DATED 12-68, WHICH MAY BE USED.

WS FORM A-7
SECTION I

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION DESCRIPTION AND INSTRUMENTATION

(WEATHER OBSERVATIONS)

Place "X" in this column to indicate a change

Station (Name, State, Airport, if any): Amundsen-Scott Station, South Pole, Antarctica

Type: WSO

Location (Name of building, street, etc.): Ground Floor, Science Bldg, Inside Dome

Prepared for close of: (Month and year) DECEMBER 1974

Latitude: 90 ° South

Longitude: — ° — ′ —

Local standard time (in use at land stations): — 180 — th mer.

Hours to convert to GMT: Add — Subtract 12 hours

Reason for rendition (Check one or more):
- X Annual rendition
- New station
- X Station relocation
- Relocation of instrument(s)
- Change, or
- Correction of data

1. TIME OF OBSERVATION (other than aviation, 3- and 6-hourlies, radar and upper-air)

Local standard time

- Soil temperature
- Soil moisture
- Thickness of ice on water
- Frozen ground layer
- River stage
- Climatological
- Evaporation
- Other (Specify)

2. ELEVATION AND DATE ESTABLISHED

Elevation	Feet (MSL)	Date
~~Field~~ Snow-Ice Cap	9340.6 ft	1 Dec 74
Field (H_g)	"	"
Station (H_p)	"	"
Barometer (H_B)	"	"
Climatological Station (Hpc)	"	"

3. INSTRUMENTATION (Location and exposure)

	Instrument (X = in use, S = standby)	XXXXXXXXXX TYPE XXXXXXXXXX	Height above XXXX (ft)	Location	Nearest obstruction	Distance and direction to obstruction	Height of obstruction above instrument	Date commissioned present exposure
V X	Direct reading wind equipment	Aerovane	30'	See Attach None				18 Dec74
V X	Other wind equipment							
	Wind receiver for direct reading equipment	Sandix - Friez Model 1414						18 Dec74
	Maximum and minimum thermometers							
	Psychrometer — Dew cell							
	Hygrothermometer — Infra red hygrometer							
	Telepsychrometer							
	Thermograph — Hygro-thermograph							
	Remote reading thermometer							
V X	Aspirated Thermohm — Bimet. raingage — Shielded	L&N 100 Ohm Cu	6'	See Attach None				18 Dec 74
	Weighing raingage — Shielded							
	Tipping bucket raingage — Shielded							
	AMOS							
V X	Barograph	Belfort #5-800	9347.*					
V X	Precision aneroid	Kollsman	9347.*					18 Dec74
V X	Altimeter setting indicator	Kollsman	9347.*					18 Dec74
V X	Sunshine XXX Recorder	Campbell-Stokes	5'	See Attach None				18 Dec74
	Multiple recorder							18 Dec74
	Solar radiation							
	Pilot balloon							
V X	Rawinsonde — Radiosonde	GMD-1B	46'2"	See Attach				24 Dec 74
	No. of station barometers 49-54 Sum of corrections +.005							18 Dec74

Instrument	Type	Height	Date commissioned
Ceilometer (1)			
Ceilometer (2)			
Ceiling light			
Transmissometer (1)			
Transmissometer (2)			
RVR Computer (1)			
RVR Computer (2)			

RADAR	Type:	Owned by:	
	Repeater location:		
AUTOMATIC PICTURE TRANS.	Receiver / Remote Rcdr.	Type:	
	Remoted from:		
RIVER GAGE	Type:	River:	
	Flood Stage	Elev. of zero of gage	
TIDE GAGE (Recorders in WS Shed)	Recorder type:		
	Type:	Owned By:	

4. Remarks and description of station exposure (Continue on separate 8½" x 10½" sheet, if necessary)

* Height above Sea Level as determined by Navy Navigation Satellite Geodesy - - Dec 74

Attachment # 1 shows the instrument exposure and overall South Pole Station layout.
Attachment # 2 shows the Meteorological Office layout on the ground floor of the Science Building within the Dome.

Prepared by (Signature): [signature] Title: Met Tech Station: Amundsen-Scott Station

WS FORM A-7 (3-70)

SUPERSEDES WB FORM 8006-16, PAGE 1, WHICH MAY BE USED.

INSTRUMENTS - Page 1

WB Form 500-1
(4-61)

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

OFFICE PREPARING FORM Amundsen-Scott Station

RENDITION: ( ) Original;
(X) Supplement No. ____

STATION Amundsen-Scott Station WSO ~~COUNTY~~ South Pole ~~STATE~~ Antarctica INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED 1 Jan 1975

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_p)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	South Pole Station	WSO	1 Oct 57	24 Dec 74	-	90° South	-	9180'	9186'	9186'
2	New South Pole Station	WSO	24 Dec 57	-	¼ mile SW	90° South	-	9340'	9342'	9347'

NUMBER OF LOCATION	ELEVATION ABOVE GROUND							(s)	(t)	REMARKS (Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
	WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER*	RAIN GAGES: TIPPING BUCKET	RAIN GAGES: WEIGHING	RAIN GAGES: 8 INCH			
(a)	(l)	(m)	(n)	(o)	(p)	(q)	(r)			(u)
2	1	2								Move from the old South Pole Station to the New South Pole Station (Geodesic Dome). Accomplished during the Austral summer of 1974-1975.

REMARKS CONTINUED:

*Or hygrothermometer

WB Form 500-1
(4-61)

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU
STATION HISTORY

OFFICE PREPARING FORM Amundsen-Scott Station

RENDITION: ( ) Original;
(X) Supplement No. ____

STATION Amundsen-Scott Station ~~COUNTY~~ South Pole ~~STATE~~ Antarctica INTERNATIONAL INDEX NUMBER 89009 DATE PREPARED 10 Nov 1975

NUMBER OF LOCATION	LOCATION	TYPE OF STATION	AT THIS LOCATION		AIRLINE DISTANCE AND DIRECTION FROM PREVIOUS LOCATION	LATITUDE	LONGITUDE	ELEVATION ABOVE MEAN SEA LEVEL		
			FROM	TO				GROUND (H)	ASSIGNED STATION (H_p)	ACTUAL BAROMETER (H_z)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	South Pole Station	WSO	24 Dec 74	1 Nov 75						

NUMBER OF LOCATION	ELEVATION ABOVE GROUND							(s)	(t)	REMARKS (Reason for move, changes in observation programs, effects of buildings or terrain, etc.)
	WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	TELEPSYCHROMETER*	RAIN GAGES: TIPPING BUCKET	RAIN GAGES: WEIGHING	RAIN GAGES: 8 INCH			
(a)	(l)	(m)	(n)	(o)	(p)	(q)	(r)			(u)
										Transfer of meteorological responsibilities from the US National Weather Service to the New Zealand Weather Service. As directed by the National Science Foundation and coordinated with NOAA.

REMARKS CONTINUED:

*Or hygrothermometer

NOAA Form 80-300
(Rev. 6-74)

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service
National Climatic Center

RECORD OF TELEPHONE CALL

OUTSIDE PARTY: Bill Callahan, W13x3	DATE: 10/1/75 TIME: 1130
FIRM: Overseas Operations Div., NWS	REFERENCE: 7/8/75 D5312 memo to Callahan
ADDRESS: Room 1334B, Gramax Building 8060 13th Street Silver Spring, MD 20910 (Include ZIP Code)	TELEPHONE NO: FTS: 301-427-7784 Commercial:

CALL:	ORG. ROUTING CODE:	JOB NO: (if applicable)	TASK NO: (if applicable)
Brower/ACB XX taken by ☐ placed by	D5 312	11089	

REMARKS:

Bill wanted to let us know that the Amundsen-Scott, Antarctica station will be operated by the New Zealand Weather Service effective January 1976. He doesn't know if NCC will continue receiving the observational forms after then. If NCC has questions, we should contact:

Dr. John Kelly
Office of Polar Programs
National Science Foundation
202-632-4162

I asked Bill if his office will be wanting NCC to produce CD's for the 1974-5 Amundsen-Scott data that is being processed here. (7/8/75 Reference: "The 1974 data for Amundsen-Scott has recently been keyed to tape and will be available for a routine application to produce CD#14 on your request)."

Bill will call later with the answer.

ADDRESSEE	ACTION	INFORMATION
CAD		X
CLIP		X
ISD		X
DOD		X