Filter Center has released you with the statement, "CHECK, THANK YOU."

THE ITEMS included in the report have been carefully analysed and selected so that individually they provide a definite portion of the information required, and collectively give a complete picture to the Filter Center. Only Item 9 is for non-specific information. Use it only when necessary. If there is no information that should be reported in Item 9, do not say anything for that item. For the other items, however, if there is no information available, state "UNKNOWN."

ITEM 1 REPRESENTS THE NUMBER OF AIRCRAFT.

Report a single airplane flying independently of a formation, or an airplane flying alone in a definite area, as "ONE."

Report a flight of two to ten airplanes (inclusive) as "FEW" and not as an exact number.

Report a formation of eleven or more airplanes as "MANY." Do not attempt to count the number if there are that many for it will take extra time, and the exact number is not required at the Filter Center.

If you can see the airplanes themselves clearly, the problem of judging the number is, of course, simple. If you can see only their vapor trails, it is hard to tell how many there are. If you cannot see them but can only hear them, the problem of numbers is even more difficult. In these cases, try to use the information you learn from pages 23 to 26 in the Aircraft Identification section of this manual. Do not guess the number. If you cannot make an accurate estimate, report Item 1 as "UNKNOWN."

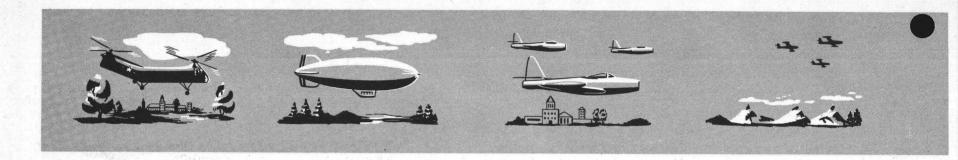
ITEM 2 REPRESENTS TYPE OF AIRCRAFT.

Report type of aircraft as follows:

using six propeller and

four jet units as "MULTI-MOTOR."

Propeller driven aircraft with one motor assi	INGLE MOTOR."
Propeller driven aircraft with two motors as	"BI-MOTOR."
Propeller driven aircraft with three or more motors as ". (Pronounce MULTI as mult-eye.	
Jet propelled aircraft with one jet—in the fuselage—as	"SINGLE JET."
Jet propelled aircraft with two or more visible jet pro- pulsion units—normally in- stalled on the wings—as (Pronounce MULTI as mult-eye.	"MULTI-JET."
If an aircraft uses both pro- peller and jet propulsion units, report it as a pro- peller driven aircraft. Thus, you would report a B-36	



If you see any other types of aircraft not included in the categories of propeller driven or jet propelled aircraft, report them under Item 9 — special remarks. Thus, if you saw a single-motored helicopter, you would say "SINGLE MOTOR" under Item 2; then when you get to Item 9, you would say "HELICOPTER." Or, if you saw a two-motored blimp, you would report "BI-MOTOR" under Item 2; and, then, when you get to Item 9, you would say "BLIMP."

To a certain extent, you will be able to tell the type of aircraft even when you can't see the airplane itself. From the vapor trails it leaves and from the sounds it makes, you can often tell much, as explained in the aircraft identification section, pages 23 to 26. Whatever you do report under this item, however, be sure it is right. Do not guess! If you cannot count the motors or identify the type of aircraft, report it as "UNKNOWN."

The identification section relies on the accuracy of the observation to assist in the proper identification of the aircraft. If your report is incorrect, it may make the identifica-

tion section believe that this is a new flight not previously reported and it will confuse the filter operation at the Filter Center. Therefore, if you are not positive in your observation as to the type of aircraft, report Item 2 as "UNKNOWN." You will never be wrong in saying unknown, but you will be wrong in guessing.

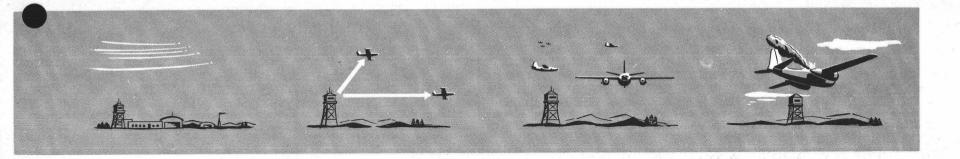
ITEM 3 REPRESENTS ALTITUDE.

In reporting this item, use your experience in observing objects and points with a known altitude.

When the airplanes are under a thousand feet — that is, when they are just above buildings, trees, and ground — report them as "VERY LOW."

When the planes are at an altitude of 1000 to 5000 feet—that is, when they are considerably above the buildings but you can see their details, such as windows and identification markings—report them as "LOW."

Report planes that are at altitudes from 5000 to 15,000 feet — when you cannot make out details such as windows and identification markings — as "HIGH."



If the planes are barely visible, or if they cannot be seen at all but are merely heard indistinctly, or produce vapor trails, report them as "VERY HIGH."

Note, though, that this altitude is based on the elevation of the Observation Post and not on sea level. Most civilian aircraft fly within the categories of "LOW" and "HIGH." Tactical military aircraft of the modern propeller and jet driven types normally operate above 15,000 feet, and thus normally are "VERY HIGH."

Here, again, if you are not certain of the altitude, report Item 3 as "UNKNOWN."

ITEM 4 REPRESENTS TIME DELAY IN REPORTING.

This item represents the time between the moment the plane is at the point being reported for it in Items 6 and 7 of the Aircraft Flash Message and the moment that the Air Defense Filter Operator answers, "AIR DEFENSE, GO AHEAD."

The purpose of this item is to let the Filter Center know that the plane is not now (at the time of reporting) at the

point being given in Items 6 and 7, but passed there so many minutes before — the number of minutes being those reported as Item 4.

Compute this time delay to the nearest minute. Thus, if the delay is less than 30 seconds, report Item 4 as "NO DELAY." If it is more than 30 seconds but less than 1½ minutes, report is as "DELAY 1 MINUTE." If is is more than 1½ minutes but less than 2½ minutes, report it as "DELAY 2 MINUTES," and so on.

If your Aircraft Flash report is delayed longer than 4½ minutes, do not complete the call to the Filter Center, but cancel it and enter the report in your log book with the notation, "Not reported, excessive delay."

Sometimes, though, the maximum allowable time delay will be greater than 4½ minutes, depending on the proximity of your post to a vital target area, the number of other Observation Posts in the area, the extent of the reporting area of your post, and the communication facilities connecting your post with the Filter Center. The decision to allow a time

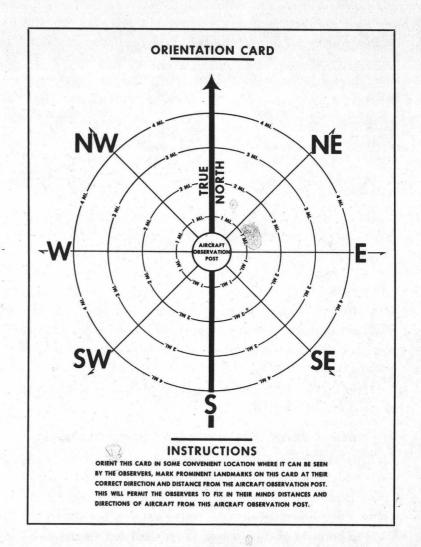
delay greater than 4½ minutes is made by the Officer-in-Charge of your Filter Center. If your post is permitted a time delay greater than 4½ minutes, the Officer-in-Charge of your Filter Center or his authorized representative will notify you. You don't have to question him about it. In other words, your maximum allowable time delay is 4½ minutes unless you are otherwise notified.

ITEM 5 REPRESENTS THE CODE NAME OF YOUR OBSERVATION POST.

The code name of your Observation Post identifies the location of your post. Like a street address, it gives the exact location of your post on the geographic grid (mapping system of the area used by the Filter Center). Each word in it plays a part in locating your post, and any omission or error will cause your report to be plotted incorrectly. Therefore, report the code name in its entirety, for example, FOX NAN THREE FIVE BLACK. State the numbers in your code name separately, for example, THREE FIVE — not thirty-five. In fact, you should pronounce each of the words in the code name very clearly-and distinctly to insure correct receipt at the Filter Center.

ITEM 6 REPRESENTS THE DIRECTION OF AIRCRAFT FROM YOUR OBSERVATION POST.

In reporting Item 6, use only the eight points of the compass as shown on your Observation Post Orientation Card, namely, NORTH, NORTHEAST, EAST, SOUTHEAST, SOUTH, SOUTHWEST, WEST, AND NORTHWEST. Do not say "NORTH



Orientation Card

OF POST" or "SOUTHWEST OF POST." Eliminate the unnecessary words, and just give the direction, for example, "NORTH" or "SOUTHWEST." To be sure of giving the proper direction, familiarize yourself with the direction of various landmarks from your post as shown on your Observation Post Orientation Card. If there are any doubts in your mind at any time about the direction, refer to the card again to make sure.

If a plane passes within ½ mile of your post, report is as "OVERHEAD." In that case, the word "OVERHEAD" will be the report both for Item 6 and Item 7.

ITEM 7 REPRESENTS DISTANCE OF AIRCRAFT FROM OBSERVATION POST.

For this item you need experience and ability in estimating distance. To a large extent, relating the location of the airplane to an established landmark which is at a known distance from your Observation Post will help you considerably in determining distance. If you identify the plane, its relative size will also help you in judging its distance from the post. For your guidance in this matter, the aircraft identification section of this manual contains illustrations showing how the various airplanes appear at different distances from you.

If the aircraft is within ½ mile of the Observation Post, report it as "OVERHEAD." This will be a combined report both for Item 6 and for Item 7, as previously explained. If the aircraft is further than ½ mile away, report its distance to the nearest mile.

ITEM 8 REPRESENTS THE DIRECTION OF FLIGHT.

Report the direction in which the aircraft is flying according to the eight points of the compass as outlined under

Item 6. To prevent possible confusion at the Filter Center, give your report for this item as "FLYING SOUTHWEST" or "FLYING NORTH." If an aircraft is circling within the reporting area of the Observation Post, report it only when it leaves the area in an established line of flight. If the airplane changes direction after you have completed the Aircraft Flash Message, you need make no further report, for it will be reported by the next Observation Post in its line of flight. If you keep on reporting unnecessarily the planes that are circling, taking off, landing, etc., in your area, it will overload the communication facilities and the plotters' equipment at the Filter Center. Where your Observation Post has to cover an especially large area, however, you may get special instructions as to your requirements for reporting aircraft. If you get such instructions, of course, you should follow them.

ITEM 9 REPRESENTS SPECIAL REMARKS.

Use this final item of the Aircraft Flash Message form to report information which should be included but is not covered in the first eight items of the report. If, for example, the aircraft you report is an unconventional type — say a blimp or a helicopter — report that information under Item 9. Use Item 9 also to report special emergency situations. If you see an aircraft in distress — for example, on fire or otherwise in damaged condition — report this information under Item 9 of the Aircraft Flash Message Form. If you see an airplane engaged in action that seems to be hostile — for example, dropping paratroopers or strafing the road — report this information under Item 9. In fact, if you observe

any unusual circumstances that you feel might be important, report them under this item.

Do not use Item 9, however, unless you have special information that is to be reported to the Filter Center. If you have nothing to report under this item, just don't say anything for it. DO NOT SAY "UNKNOWN."

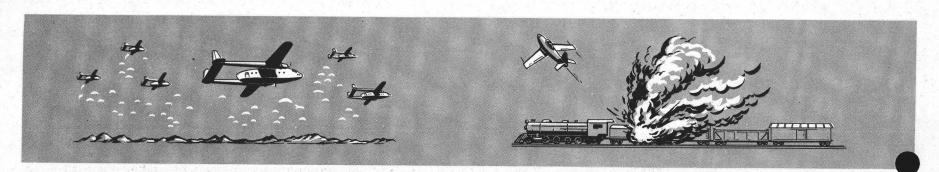
AFTER COMPLETING THE REPORT, keep your telephone connection until you are released by the statement "CHECK, THANK YOU." Don't hang up until you are released, for the Filter Center may have to ask you for additional information to enable it to take proper action on your report.

THE COMPLETE AIRCRAFT FLASH REPORT should be delivered to the Filter Center operator in precisely the same sequence as the items are listed here. If any item of the message (other than Item 9) is unknown, state it as "UNKNOWN" in your report. If the aircraft you are reporting is passing within ½ mile of the Observation Post, you may combine Items 6 and 7 into a single item and report is as "OVERHEAD."

Read your report directly from the Form 6-3, and say it in a definite cadence for clarity. Follow the telephone procedure as outlined in this manual, speaking directly into the transmitter. Do not speak rapidly — remember that the Filter Center operator must record your information on the Filter Board.

To see how the procedure works, consider the following situation as an EXAMPLE:

Suppose you observe some airplanes entering the designated area of responsibility of your Observation Post. Taking into account their speed and direction of flight, and using past experience as to normal time delay in the call (as explained on page 17), you wait an appropriate period, call your operator, and state, for example, "AIRCRAFT FLASH BROOKSIDE 37824." The local operator will connect you with your Filter Center, which will answer by saying, "AIR DEFENSE, GO AHEAD." Suppose, now, that you had determined that there were three 4-engined jet airplanes directly south of your post flying westwardly at a very high altitude. At this



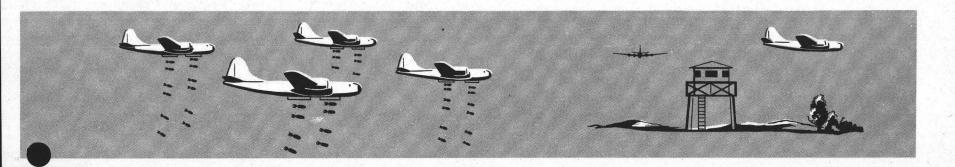
time, the airplanes should have reached a point at the nearest distance to your post that their line of flight will permit. When the Filter Center Operator states, "AIR DEFENSE, GO AHEAD," you say, "AIRCRAFT FLASH — FEW — MULTI-JET — VERY HIGH — NO DELAY — FOX NAN THREE FIVE BLACK — SOUTH — TWO — FLYING WEST." (Each dash indicates a slight pause. This will mean that the entire message should take 10 to 15 seconds. The Filter Center Operator will then ask for a repeat on any item he has failed to receive by saying, "SAY AGAIN ITEM .." For example, he might say, "SAY AGAIN ITEM 3." To reply, you would say, "ITEM 3 — VERY HIGH."

When the Filter Center has received your information correctly, the operator will say, "CHECK, THANK YOU." You will immediately hang up your telephone to clear the line for additional reports from other Observation Posts.

If there are more than one type of aircraft (see Item 2, Flash Message Form), flying within the area of responsibility of your Observation Post, or if aircraft of the same type are not flying in formation, report them by using subsequent

Aircraft Flash Messages. It may also happen that a second airplane enters your reporting area while you are in communication with the Filter Center reporting the flight of another aircraft. If any of these things occur, do not place a new call from your Observation Post. Instead, add a subsequent report to your first message. That is, when you have completed reporting the first airplane, you say, "I HAVE ANOTHER MESSAGE FOR YOU." Be sure to make the statement, "I HAVE ANOTHER MESSAGE FOR YOU," before the Filter Center Operator says, "CHECK, THANK YOU." If necessary, the Filter Operator will say "WAIT"; when the plotting of your initial report is completed, the Filter Operator will say, "GO AHEAD, PLEASE." Then you say, "AIRCRAFT FLASH, etc." giving all the items for the second Aircraft Flash Message.

Use this type of sequence in reporting more than one flight of aircraft whenever necessary, but use it with discretion. When you are in doubt, or when you do not have your Aircraft Flash Message form completed for the subse-



quent report, be sure to terminate your conversation. Never hold the Filter Center Operator on the line under these circumstances. You are not only tying up communication facilities from your Post to the Filter Center — you are trying up the Filter Center Operator as well. Hang up and place a new Aircraft Flash Message indicating the proper time delay, as explained under Item 4.

In addition to being careful about this item, here are some other important "DON'TS" you should observe.

Don't Report The Column Heading Of The Aircraft Flash Message Form 6-3. Just give the items in their proper sequence and timing; for example, say, "AIRCRAFT FLASH — FEW — MULTI-JET — VERY HIGH — ONE MINUTE DELAY — FOX NAN THREE FIVE BLACK — OVERHEAD — FLYING SOUTH."

Don't Wait For A Confirmation Of Receipt For Each Column. At the end of the Flash Message, the Filter Center Operator will ask for a repeat on any item not understood by saying, "SAY AGAIN ITEM ..." If all is received properly, the Filter Center Operator will confirm the report by the statement, "CHECK, THANK YOU."

Don't Report Aircraft Out Of Your Area Of Responsibility. This results in duplicate reports from your post and the adjacent Observation Post.

Don't Guess When You Are Not Certain Of The Information In Any Column. Say "UNKNOWN." Guessing may result in improper action at the Filter Center and additional delay in the Identification section. Guessing is the same as false reporting.

Don't Delay A Report By Waiting To Secure Information In Any Column Of The Flash Message Form. This will result in a delay which may prevent an interception of a hostile aircraft by our Intercept Fighters, since they may be relying on your information to give them the current location of the hostile aircraft.

Besides observing and reporting aircraft, your duties will include also the responsibility for keeping a record, or log, of your observations. This will be a relatively easy task, for your Aircraft Flash Message Form No. 6-3 can well serve this purpose. By just adding the date at the top of the form and by recording the time of each observation in the margin to the right of Column 9, you can make your Aircraft Flash Message Form No. 6-3 a most useful log of your observations. For any special remarks or comments, you can use Column 9. However, if such special remarks or comments are not of the type that should be reported to the Filter Center as part of your report, do not write them in until after you have completed your call. Otherwise, you might inadvertently report them to the Filter Center and create a certain amount of confusion.

Other types of records, such as diaries, duty shifts, personnel lists, and the like, will also be needed at your Observation Post. However, you are not likely to be responsible for any of these, except, probably, to sign on and off duty. Whatever the situation, be sure to carry out your responsibilities fully, for your work as a Ground Observer is an essential part of our Air Defense System.