

HEADQUARTERS 306TH BOMBARDMENT GROUP (H)
Office of the Intelligence Officer
United States Forces

24 July, 1943

SUBJECT: Intelligence Report.

TO.....: Commanding Officer, 306th Bombardment Group (H).

1. Hot News.
None.

2. Narrative.
21 A/C took off at 0905 hours to bomb the magnesium works at Herøya, Norway. 20 A/C bombed the target; one returned early. The route was generally as briefed except overran target and beached on return.

3. Bombing.
Looked to be right on nose. Lead Group missed target which permitted our lead bombardier to pick up A.P. and drop first bombs. Heavy black smoke was seen billowing up at estimated 5000'. Probably wont have to go back there again.

4. Abortives.
1 A/C with #4 prop running away turned back 65 miles from English coast at 1035. Jettisoned bombs to hold altitude.

5. Enemy Aircraft.
2 F7s, 1 He109 attacked formation vigorously at 1355. Came up from Norway and made head on attacks. 1 was shot down as it went through entire formation. At 1415 hours and 3000', 10 S/E B/A at 57°25'N-06°40'E attacking our formation and continued until 1440. These were hard pressed tail attacks. No unusual markings.

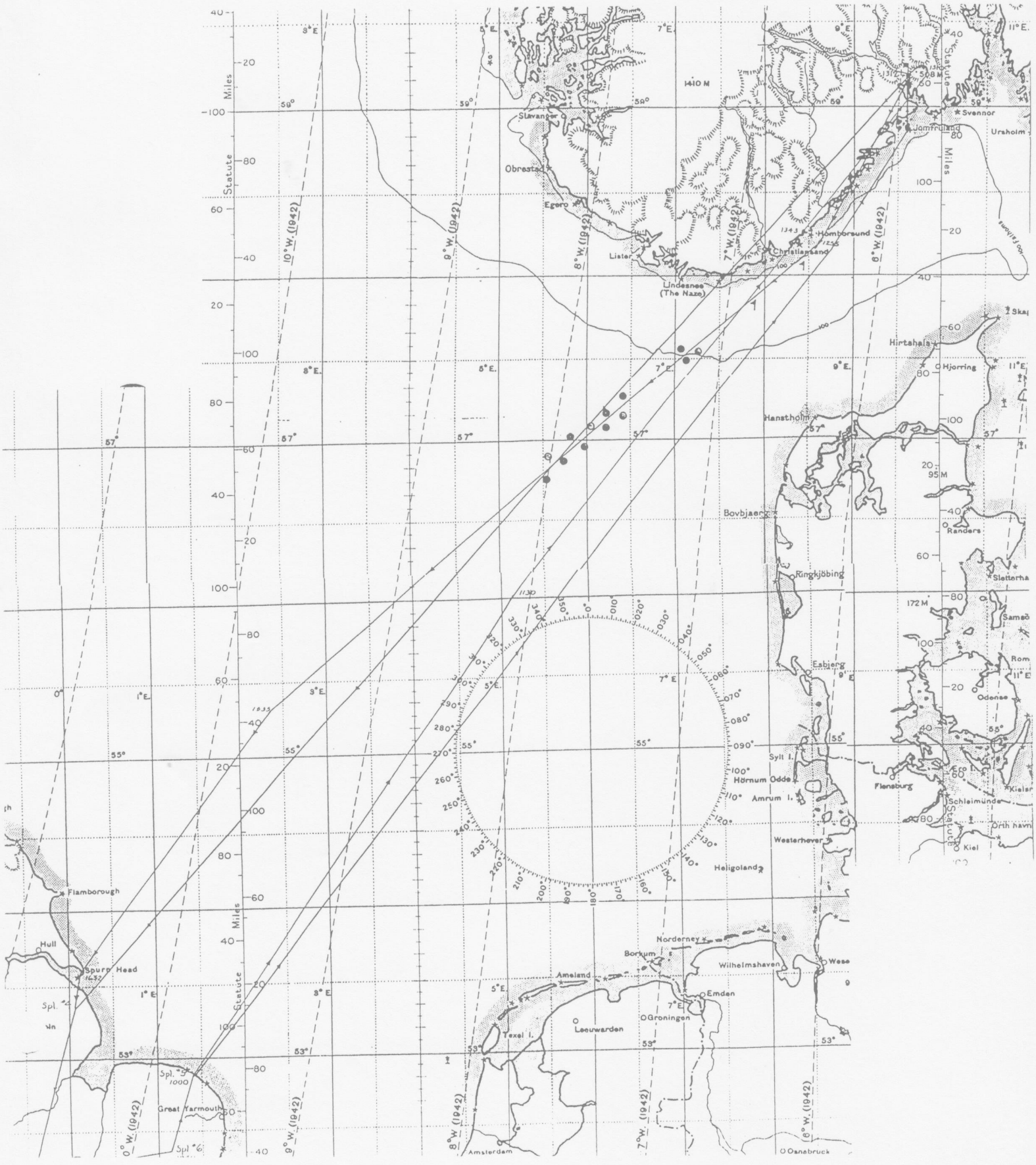
6. Gun/A.A. Fire.
Estimated 15 guns at target.- Fairly accurate as to height and location - Bursts were in 4's and fire was probably continuous following. Bursts were black and the usual size. Several flak boats along coast fired red bursts - ineffective but was signal to fighters.

7. Observations.
1 enemy ship thought to be A/C carrier disguised with masts observed at 56°34'N-04°50'E at 1525 hours and 3000' altitude. 1 B-17 crossed our formation at 1634 hours and seemed to be headed for Germany. Crews feel that formation should stay at sufficient altitude over clouds to protect against surprise fighter attacks. Maps of Norway are reported by navigators to be very inaccurate.

JOHN B. WRIGHT,
Major, Air Corps,
Group 2-2.

Heroya, Norway

24 July 1943



Hq. 306th Bomb Group (H)

FLAK REPORT

Date 24/7/43

Target Heroya, Norway

1. Route followed. Crossed enemy coast at Christiansand, to 2 miles north of Jomfreeland to 59° 15' N, 10° E, to Heroya, to 5 miles west of Jomfreeland and paralleled the coast 10 miles offshore.

2. Visibility at Target (Any condensation trails?) No condensation trails. 8/10 cloud to edge of target causing group to overshoot first run, but made a turn and had good visibility on bomb run.

3. No. of A/C over Target. 20 A/C.

4. Formation over target, with height of each A/C. Those A/C damaged by Flak to be circled, and if seriously damaged, insert small "S". If any A/C shot down by Flak, say so:-

						High	
	428		9629	426	978	971	156
	14800	793	15400	15100	15400	15000	15300
	052	14900	826	993	417	777	841
	14790	487	15400	15000	15000	15500	15300
		14600			557	900	
					15200	15600	

5. General Axis of attack (from lead A/C if possible) 265° Magnetic.

6. How long did formation fly straight and level before bombing? 2 minutes.

7. Turn after bombing. Gradual, slight left turn.

8. Position of Group in relation to other Groups. First group over target.

9. What evasive action was taken? Slight weaving action after bombs away.

10. A short description of Flak en route (if any) and at the Target, including if possible a suggestion as to type of fire control employed - i.e. Continuous following predicted concentrations, predicted barrages, or fixed barrages.

1317 - Heroya, 15000', heavy black, fairly accurate on this group but very accurate on group behind, continuous following. Estimated 15 guns.

A predicted concentration was observed off to right of group. 1342 - Off coast near Christiansand, 8 bursts of red flak from ship followed almost immediately by E/A attacks.

Brevik - The tail gunner on one crew reported seeing almost a hundred bursts from Brevik.

11. Any other Comments, Phenomena, etc.

The 306th Group took the lead away from the 92nd at 59° 15' N, 10° E because they evidently missed the target. The 92nd Group again took the lead on the way home about 50 miles south of Jomfreeland.

DECLASSIFIED PER EXECUTIVE ORDER 12356, Section 3.3, 7450C

By RLB/BAC NARA Date 1/8/91

HEADQUARTERS 306TH BOMBARDMENT GROUP (H)
Office of the Materiel Officer
United States Forces
A. P. O. 634

F-A-7

24 July, 1943.

SUBJECT: 3-4 Combat Mission Report on Mission 24 July, 1943.

TO : Commanding Officer, 306th Bombardment Group (H), APO 634.

1. The following listed Aircraft of this Group was a Class "A" abortive:

(1) A/O No. 42-30163 returned early; runaway propeller on No. 4 engine.

2. The following Engineering Malfunctions occurred:

- (1) Superchargers lagging - 3
- (2) Fuel Booster Pumps Out - 1
- (3) Engines Running Rough - 4
- (4) Propellers Running Away - 1
- (5) Brakes weak - 2
- (6) Propellers Doms Leaking - 1
- (7) Engine using Excessive Oil - 1

3. The following Armament malfunctions occurred:

- (1) Left Ball Turret gun extractor Assy. jammed between side of receiver and bolt - 1
- (2) Upper turret gun sight out - 1

4. The following Radio and Instrument malfunctions occurred:

- (1) Command Transmitter Out - 1
- (2) Command Receiver Out - 1
- (3) Co-Pilots and Ball Turret mike switches out - 1
- (4) Antenna tuning unit burned out - 1
- (5) Interphone noisy - 2
- (6) "Gee" Radio out - 1
- (7) No. 2 tachometer out - 1
- (8) S.B.A. needs checking - 1

5. The following safety equipment malfunctions occurred:

- (1) Zoot Suits burning out - 1
- (2) Oxygen leak on waist position - 1

6. The following battle damages were received:

Total No. Damaged	- 7
Minor Damages	- 5
Major Damages	- 2
By Flak	- 2
By Fighter	- 4
By Friend	- 1 (Empty Shell Cases)

HENRY J. SCHMIDT,
Major, Air Corps,
Materiel Officer.

12500, Section 3.3
Date 1/8/44

By RIB/BAC

14500
Date 1/8/44

BAC

(F-A-6)

HEADQUARTERS 306TH BOMBARDMENT GROUP (H)
Office of the Materiel Officer
United States Forces
APO 634

24 July 1943.

SUBJECT: S-4 Summarized Battle Damage Report.

TO : Group S-2 Officer, 306th Bombardment Group (H).

1. The following is a summarized battle damage report on Mission of 24 July 1943:

(1) Flak Damages:

B-17F-42-29993, 369th Squadron.
(a) Small hole in plexiglass nose.

B-17F-42-29793, 368th Squadron.
(a) Small hole in leading edge of left wing between No. 2 engine and fuselage.

B-17F-42-3142, 368th Squadron.
(a) Nose section broken.

(2) 303 Damages:

B-17F-42-29971, 423rd Squadron.
(a) Bombardier's window broken.
(b) Hole thru left horizontal stabilizer.

(3) 20 MM Damages:

B-17F-42-5841, 423rd Squadron.
(a) Main spar in outer wing damaged.
(b) Inner wing damaged.

B-17F-42-5086, 369th Squadron.
(a) Right wing tip and aileron damaged.
(b) Right horizontal stabilizer and elevator damaged.
(c) Left outer wing damaged.
(d) Left inner wing near bomb bay damaged.
(e) Tail gunner's compartment severely damaged.
(f) Holes in fuselage near left waist gun.
(g) No. 4 engine damaged.
(h) No. 4 cowling damaged.
(i) Hydraulic system shot out.

(4) Empty 50 Cal. Shell Damages - Self Inflicted:

B-17F-42-3142, 368th Squadron.
(a) Hole in leading edge of right wing between No. 3 and 4 engines.

For the Commanding Officer:

Henry J. Schmidt
HENRY J. SCHMIDT,
Major, Air Corps,
Materiel Officer.

DECLA

ED PER EXECUTIVE ORDER 12356, Section 3.3, 745005

By

RIB JAC

Date

12356, Section 3.3, 745005

2A Date

10. ENEMY FIGHTER OPPOSITION:

1 129 12/4/46
1 129 12/4/46

25 all total

(Estimated total number of E/A seen) (Types)

Cit 1853 ~~at~~ Topdals Fjord. Dist.

(Location and length of fight)

20-30 attacks many formation Made climbs, attacks from behind ahead and wide single attacks.

(Tactics of E/A)

All dark and black planes. Green bottoms.

(Color, markings, etc. of E/A)

(Our defensive action)

CLAIMS

DESTROYED

PROBABLY

DAMAGED

(Fill out immediately separate CLAIM FORM for each claim.)

11. FIGHTER SUPPORT

none

12. OBSERVATIONS: Give TIME, PLACE, HEIGHT (List any observations of military importance such as balloons, decoys, dummies, camouflage, smoke screens, enemy signals; activity at airdromes, ports, water-ways, roads, railroad yards; concentrations of vehicles, troops, vessels; landmarks, new enemy installations, see file.

13. INCIDENTS TO FRIENDLY A/C: (If one of our A/C lost, state whether by A.A., E/A Action, Accident or Undetermined Cause)

none

14. INJURIES TO CREW: (Give name, position in A/C, type of injury, how received, PLACE and TIME.)

none: ~~captain~~ foot sore on head from 5000

15. DAMAGE TO A/C: (Briefly)

shell sig thru glass at 1853 1500 will go to hospital in 10 days

16. TECHNICAL FAILURES:

none

17. CREW COMMENTS: (Any unusual incidents? any suggestions?)

Normally well done
Tech Clin Capt

S-2 OFFICER

TIME COMPLETED



Mr. Russel A. Strong
Director, Alumni Relations
WMA ALUMNI
Alumni Center
Western Michigan University
Kalamzoo, Mich. 49008

Your ref.

Your letter of

Our ref.
Mg-div.
Høy-Petersen:Lis

Date
Febr.5, 1981

Dear Mr. Strong,

We take reference in your letter of August 20ies 1980 concerning US 8. Air Fore' attack at Herøya July 24th 1943.

Your letter has been mislaid and we deeply regret our delayed answer.

The target for the attack at Herøya was the works belonging to Nordisk Aluminium A/S.

The Germans were building plants at Herøya at that time in order to produce the lightmetals Magnesium (10.000 mt) and Aluminium (12.000 mt) due to its importance to the war. Those constructions, not yet ready for production, were situated close to Norsk Hydros factories for nitrogenous fertilizers.

Consequently Norsk Hydros factories as well were damaged pretty hard during the attack.

The attack was made by US 8. Air Force' 8 aeroplanes and in total 1500 bombs or approx. 300 tons were dropped.

- 2 -

Postal address:
P.O.Box 2594 Solli

Office address:
Bygdoy allé 2

Phone:
National: (02) 43 21 00

Telegrams:
norskhydro

Telex:
18350 hydro n

Mr. Russel A. Strong.
February 5, 1981.

- 2 -

The damages on Nordisk Lettmetall were so severe that the Germans definitely cancelled all further plans concerning the lightmetal production at Herøya during the war. The production of magnesium was, however, started in 1951 based essentially on the German constructions.

As to heavy water this commodity has never been produced at Herøya, but on the other hand at Norsk Hydros factory at Rjukan and Glomfjord.

./ Enclosed please find an old pamphlet (1975) covering Norsk Hydros Porsgrunn Fabrikker at Herøya were the production to-day covers 50.000 mt magnesium metal.

We hope the above information can be of any help to you.

Yours faithfully,
For Norsk Hydro a.s

Nils Høy-Petersen
Nils Høy-Petersen

Encl.

1974

...and-a-half years after the German invasion, Milorg had a policy which, in all important aspects, duplicated the nonviolent of the civilian resistance.

Despite his cautious approach, Jens Christian Hauge was an energetic competent administrator who set about creating an organization that would avoid the mistakes of the past and recruiting an army to take over the country when liberation occurred. Milorg districts throughout the country were restructured in military fashion, with detailed tables of organization which assigned a number to every man, and every man to a specific job.

Security was stressed, for Hauge and his staff were determined to avoid the catastrophic security failures that had resulted in German arrests of Milorg in 1941 and 1942. To prevent any recurrence a mark warning system was devised. Contact cards were prepared for every Milorg member which listed all other Milorg men the individual knew. If a Milorg member was arrested, the security officer for his unit assumed the responsibility of warning all contacts on the arrested man's card. Hauge realized that it was unrealistic to ask a captured member to resist and torture during interrogation, but it did ask its men to maintain silence for twenty-four hours if possible. By then, it was hoped, all those on his contact card would be on their way to Sweden and the Germans would hit into empty air when they set out to make arrests.

Morale among Milorg's rank and file, nevertheless, was low. Hauge's emphasis on paper work and organization and the prohibition of active sabotage frustrated many. "Instead of tasks, they got disillusions," Hauge admitted after the war. "Instead of guns, they got disillusionment set in. Throughout late 1943 and 1944, Hauge was increasingly concerned that the frustration imposed on his men by his policy of moderation and caution would impel activist members to break away and join other smaller but more aggressive resistance groups.

In the forefront of those Norwegians calling for a policy of force against the Germans stood the Communists, most of whom had reached their position only after Hitler's attack on the Soviet Union. There had been a few Communists who advocated resistance against Germany from the earliest days of the German occupation, among them Peter Furubotn, a Communist leader in Bergen, but party leaders in Oslo ignored Furubotn; and the majority of party members could no more hear his call for resistance than could the mass of non-Communist Norwegians hear the appeals of those few non-Communist underground leaders who had started an active resistance from the start. For the Norwegian Communists, Hitler's invasion of Russia provided a clear turning point in their affairs that overnight defined for them the correct course of action to take. Within months, the Communists adopted an active line and the

Factory is the headquarter of Norsk Hydro, the biggest company in Norway, now heavily engaged in oil-business.

slogan "Deny all weapons to the enemy." Unlike Milorg, the small but well-organized Communist apparatus sought to build a home-based resistance capable of striking out at targets of its own choosing, independently of orders from London. Through the entire occupation, the Communists held fast to their active line and never ceased to criticize Milorg's cautious policy as symptomatic of a corrupt capitalist society, more interested in protecting Norwegian industries than in defeating the Germans. Despite Norway's basic antipathy to communism (there had not been a single Communist representative elected to the pre-war Norwegian Parliament) the Communists' wartime appeal for an active resistance gained support as the war progressed.* After the war Hauge confessed that one of his most difficult problems during the last two years of the occupation was to project a militant Milorg image to hold his recruits while at the same time remaining loyal to the agreed-upon policy of a generally passive resistance obedient to orders from London.

Forces other than the Communists joined in driving Milorg to adopt, if only in theory, a more active sabotage line. In 1943, a new controversy over bombing versus sabotage split the Allies in London and pitted Norwegians of all viewpoints against British and American Air Force officers.

Allied air officers had by then become convinced that their growing armadas could bomb Germany into submission, and they determined to press the attack against all targets, regardless of location, considered vital to the German war effort. Targets in occupied countries were not exempted. To the Norwegians in London, however, the possibility of massive Allied air raids against Norwegian plants and port facilities threatened the destruction of the nation's industrial base on which the country's postwar recovery depended. Under no circumstances would the Norwegians approve an air campaign against Norwegian targets. Instead of bombing raids, they suggested an active campaign of sabotage, which they had hitherto resisted. While there might be German reprisals as the result of sabotage actions, the cost in Norwegian lives and property resulting from Allied bombing raids would be far higher. On this point all Norwegians agreed.

The Allies, nevertheless, went ahead with their bombing offensive without bothering to consult the Norwegians. Starting in early summer, 1943, Allied bombers began regular heavy raids against targets in Germany and German-occupied Europe, including Norway. In one July raid 167 Flying Fortresses dropped more than fifteen hundred 500-pound bombs on a large fertilizer factory complex at Heroy, near Oslo, causing

* The increased popularity of the Communists carried over into the postwar years, when in the first free election after liberation Norwegian voters elected eleven Communist members to Parliament out of a total membership of 150. Norway's acceptance of Communists was short-lived, however. By the early 1950s and the formalization of the Cold War between the United States and the Soviet Union, popular support for the Communists evaporated to pre-war standards.

heavy casualties among the population. The Norwegian exile government learned of the raid only after it had been carried out and filed immediate diplomatic protests with both London and Washington. At the very least, the Norwegians insisted, they should have been informed of the raid before it was carried out. Before Norway received a reply to her notes of protest, however, the American air command carried out another major raid, again without notifying the Norwegians, this time against the Norsk Hydro heavy-water plant at Vemork, which only a half-year before had supposedly been put out of action by Norwegian saboteurs operating under orders from the SOE.

The British reassessment of the Norsk Hydro sabotage raid had begun in March, 1943, one month after the raid itself. At the time British damage-assessment experts estimated that the facilities that produced heavy water for Germany's atomic-bomb program had been so heavily damaged that production would be halted for two years at least. The British, however, had miscalculated badly. Within two months, Norwegian agents began to file disturbing reports. German engineers and Norsk Hydro technicians had managed to get the heavy-water plant back into production. The first heavy water was drawn off and shipped to Germany in late June.

By August German engineers succeeded in raising production to a level that promised to bring the plant's annual output up to three tons, far in excess of Germany's needs. By October Gen. Leslie R. Groves, who headed America's Manhattan Project, which was pushing toward the creation of its own atomic bomb, had become so worried about the increase in production at the Norsk Hydro plant that he urged Gen. George C. Marshall to authorize a high-priority bombing attack against the Norwegian target, despite the certainty of civilian casualties. Marshall agreed. The assignment went to the American Eighth Air Force stationed in Britain, and on November 16, 155 Flying Fortresses from the Third Air Division roared aloft, escorted by long-range fighters, and headed for Vemork. In thirty-three minutes over the target, the giant bombers dropped more than seven hundred 500-pound bombs on the Vemork plant. Another one hundred smaller bombs rained down on the nearby town of Rjukan. Twenty-two Norwegians died in the raid, including one man in a forest several miles away who was killed by a jettisoned bomb. As a high-precision raid, however, the results were disappointing. German smoke generators effectively screened the target area, and while there was heavy damage to surrounding facilities, the plant itself escaped unharmed and previously produced stocks of heavy water remained untouched.

News of the raid shocked the Norwegian government in exile, which lodged formal protests with the British and American govern-

ments. The Norwegians complained that the damage caused by the raid was "out of all proportion to the desired effect."

The attacks on Vemork and Rjukan were executed without the Norwegians' prior consent and without their even being informed. If the reason for the attack was the necessity of stopping . . . production of heavy water . . . specialized methods of attack would have been more suitable than bombing.

The British government took a month before it formally rejected the Norwegian note. Britain insisted upon the right to select bombing targets and insisted also that Vemork had been bombed because intelligence information indicated that another sabotage attempt would be unsuccessful. The Americans took even longer to answer. Eventually they too rejected the Norwegian protest, archly assuring the Norwegians that the raid had been thoroughly investigated beforehand, an answer that left the Norwegians in London frustrated and angry.

German reaction to the Vemork raid was prompt. On November 30, London learned of German plans to transport to Germany all the heavy-water equipment in Vemork from Einar Skinnarland, the radio operator left behind after the first sabotage raid on Vemork. In late December, Skinnarland added to his original report. He told London that the Germans also planned to ship to Germany the entire stock of heavy water at Vemork. By then it amounted to fourteen tons, and it was deemed vital to Germany's last-ditch effort to complete an atomic bomb of its own. German plans to ship the heavy water and equipment neared completion in January. The heavy water was stored in special drums marked "potash lye" and placed under the protection of a special Army unit sent from Germany to ensure the shipment's safe arrival. A senior German atomic scientist arrived at the Norsk Hydro plant to oversee personally that all precautions were taken. Negotiations began with Norwegian authorities for transportation to carry the shipment to the port of embarkation.

The rapid pace of German efforts alarmed British intelligence officers, who were remarkably well informed of German intentions by a number of Norwegian contacts. In late January British intelligence asked Skinnarland if he could determine the exact date of the shipment and if the transport could be prevented. Skinnarland replied that if London wanted action, they would have to decide quickly for the transport was scheduled to take place within a week. As for how the transport could be prevented, Skinnarland had no suggestions; he left that to his superiors in London.

Once again London faced the problem of trying to decide how to destroy Norsk Hydro's heavy water. If anything, the difficulties appeared greater than ever before. The failure of the November bombing raid ruled out a similar effort, and tightened German security around the plant

shipped from
the Herøya
plant