Reading, analysing and interpreting a

Marine and Coast Watching Service Look Out Post Log Book

Dr Michael Kennedy, Royal Irish Academy

Contents

1:	Introduction
2:	The layout of a LOP logbook
3:	Reading a LOP logbook

- 4: Interpreting an 'Event'
- 5: The information in a LOP logbook
- 6: Transcription of LOP logbooks to an electronic format
- 7: Interpreting events in LOP Logbooks
- 8: Plotting observations from LOP logbooks onto basic maps

Appendix 1: What does a LOP see and report on a regular basis?

Appendix 2:

Appendix 3: Merging reports from LOPS

1: Introduction

The many thousands of entries in the logbooks of the Look Out Posts (LOPs) of the Defence Forces' 1939 to 1945 Marine and Coast Watching Service (M&CWS) provide a unique source of raw information on neutral Ireland's experience of the Second World War.

Former Coastwatcher Comdt Eoin Quinn estimate that the 501 surviving M&CWS logbooks held at Military Archives, Cathal Brugha Barracks, Dublin collectively contain over one and a half million entries. Their unparalleled historical value is that are a unique real-time war diary of the Second World War in Ireland's seas and skies. They provide historical information that no other source can provide about the Second World War close to Ireland.

The purpose of this essay is to explain what readers can expect to find in a LOP logbook and to provide suggestions as how to go about searching the initially confusing mass of entries that each logbook contains and then interpreting and analysing the material within.

From reading this essay individuals interested in LOPs and their logbooks should be able to:

- 1: Understand the layout of LOP logbooks and the variety and type of data to be found in LOP logbooks;
- 2: Interpret individual logbook entries;
- 3: Assess logbook entries over time to discover trends in 'events' reported by LOPs;
- 4: Transcribe information electronically from logbooks;
- 5: Plot observation and event information from logbooks on simple maps;

If you are interested in a specific post or set of posts make sure to visit their location/s to see what a Coastwatcher stationed there could see. Often geographical or topographical factors may have had an impact on the reporting from a post as they may have obscured particular directions of sight. Similarly, the prevalence of a particular weather phenomena, such as fog, may have hindered the operation of a LOP.

Serial No.	Events, Messages, Incidents		nts, Messages, Incidents	Action Taken	
	Date	Time	DETAILS	Ĩ	

2: The layout of a LOP logbook

1: LOP logbook layout

LOP logbooks were introduced in early 1940 and follow a standardised pattern recording events from early 1940 to June 1945 when the Coastwatching Service was closed down. They record events, messages and incidents at each post and what action was subsequently taken. Each 'Event' was

assigned a unique serial number, the date and time and details were recorded, and subsequent action taken was noted.

Serial No.	Events, Messages, Incidents			Action	TAKEN		
	Date	Time	DETAILS				
65	25/2/41 11.50 One Sea Plane sighted two miles east of LOP Flying low in a westwardly direction. Visibility Good Nationality British		Informed Castle by Phor	Hazelwood ne call	Light wind, Sea Visibility	south Calm, Good	

3: Reading a LOP logbook

2: A routine sighting from St. John's Point LOP, Donegal (LOP No. 70)

The most straightforward way to approach a LOP logbook is to start at any given date and read each consecutive entry. This will build up a picture of the LOP routine, personnel, sightings and significant events over time. This is a good way to get an introduction to a LOP and to establish what was generally happening at a LOP. Consecutive entries will cover changes of watch and say who was on or off duty, visits by the District Officer to the post to check its operation, observations and sightings of activity, weather and 'all clear' reports'.

However if one reads instead by the serial numbers of events and incidents this bypasses changes of watch and other 'housekeeping' activities and goes straight to the significant 'events' sighted and reported by each LOP.

As with any primary sources historical information, logbook entries are subject to errors and in-built limitations such as inaccurate or incomplete reporting, errors in date- and time-keeping or the flawed interpretation of sightings. While Coastwatchers had local knowledge of the area they served in, they often roughly estimated distance and altitude in their reports and were not always au fait with technologies and weapons systems they were observing. Clocks at LOPs were not accurately synchronised and so viewing the same event across individual logbooks needs to take account of flaws in time keeping. Yet when these caveats are taken into account, the records of the M&CWS are a remarkably accurate historical source.

In simple physical terms, if an entry takes up more room on a logbook page than most entries then it is more than likely an important entry. However Coastwatchers recorded evolving trends, so groups of entries are also significant. Always try to visualise what is happening as you read a logbook. Each entry is often part of a larger ongoing development.

4: Interpreting an 'Event'

Serial No.	Events, Messages, Incidents	Action Taken

	Date	Time	DETAILS					
	25/2/41	11.50	One Sea Plane sighted two miles	Informed	Hazelwood	Light	south	
65			east of LOP Flying low in a	Castle by Phone call		wind, Sea	Calm,	
			westwardly direction. Visibility			Visibility	Good	
			Good. Nationality British					
2 1	$2 \downarrow 1 \downarrow $							

3: A routine sighting from St. John's Point LOP, Donegal (LOP No. 70)

In the 'event' recorded above - Serial 65 from St John's Point LOP (LOP 70) - a number of points are immediately identifiable. Up to February 1941 St John's Point was clearly a quiet LOP as only 65 incidents had been reported from September 1939 to February 1941.

An internet search shows that Hazelwood Castle was the local military post that the LOP was reporting to.

The seaplane sighting is the most important detail. Reference to a map of the area (OSI Discovery Series Sheet 10) allows the location and direction to be plotted. It is a British seaplane flying to the west out towards the Atlantic Ocean. Further work is necessary to draw more information from this event and to place the sighting in context. This is outlined at section 7 below.

5: The information in a LOP logbook

Because of the 'raw' factual nature of the information contained in each entry in each logbook, and the lack of analysis of any of that information at LOP-level, readers of logbooks have to piece together events, such as the seaplane sighting above, and interpret each event in the context of previous and subsequent events to work out what is actually happening at each LOP at any given time.

Intelligence officers at Command and later 'Sector' level interpreted reports from LOPs to attempt to deduce what was occurring at any location around Ireland's coast. Historians working on LOP logbooks are undertaking a similar exercise, though with the benefit of hindsight and a massive body of supporting material. Establishing the context of any given entry is of considerable importance, and often the importance of an entry will only become clear by placing it in a context the Coastwatcher reporting the event may have lacked (see Appendix 3 below).

While some LOPs were expert in accurately identifying the aircraft that they sighted, others were not so adept. It was often difficult to accurately identify a fast-moving aircraft in changing weather conditions with often poor-quality binoculars or telescopes. Recording the basic identifiers of 'Wings, Engine, Fuselage, Tail' was hard enough, and placing a type and nationality or even squadron number on the aircraft was harder still.

6: Transcription of LOP logbooks to an electronic format

If one wishes to transcribe information from a logbook a table in MS Word (as shown above) or an Excel spreadsheet, particularly with auto-fill enabled, will ease the process considerably. Below, significant events from 25 to 29 May 1940 from Loop Head LOP have been reproduced as a table in MS Word taken from an Excel spreadsheet. Events have been colour coded (yellow = belligerent naval; green = Irish air traffic; blue = Irish naval traffic). Routine events have been left out.

Serial	Date	Time	Event
160	25/05/1940	1635	2 Destroyers 16 miles W of Post turned and went out of sight in a SW direction.
165	28/05/1940	2250	Garda phoned post with instructions from Captain Lane to keep constant watch during the night.
166	29/5/410	540	Two low wing monoplanes 6 miles southeast coming out over the Shannon. One of them circled and went off in a Northerly direction. And the other went out west – Nationality Irish.
167		800	Sighted armed steamer 8 miles S going E Irish.
168		1240	Muirchú sighted half mile S of the post flying J flag two Blues and a White. Send Semaphore ashore - Anything to Report.

7: Interpreting events in LOP Logbooks

To develop the points made at the end of section 4, readers of logbooks should realise that while individual entries on their own are interesting, it is the evaluation and analysis of entries over time to show trends and developments that really indicates what is happening at a given location. Such analysis really brings out the value of LOP logbooks as an historical source for Ireland's Second World War. Below is a transcription of all events from St John's Point LOP given a serial number from 21 February to 7 March 1941 – serials 57 to 73, with Serial 65 referred to above printed in red.

Serial No.		Events, Messages, Incidents		Events, Messages, Incidents Action Taken		
	DATE	Time	DETAILS			
57	21/2/41	18.45	One highwing monoplane 12 miles south of LOP travelling SE altitude and nationality unknown	Informed Hazelwood Castle by 3 minute phone call	Light south wind, Sea Calm, Visibility Poor	
58	22/2/41	11.45	Sighted one plane 4 miles west of LOP flying low went S. East then turned and came back west. Nationality unknown visibility moderate	Informed Hazelwood Castle by Phone call	[No weather report]	
59	22/2/41	14.10	One monoplane 5 miles S East of LOP flying low in a westerly direction. Nationality unknown, visibility good	Informed Hazelwood Castle by Phone call	Light east wind, sea calm, visibility good	
60	22/2/41	17.50	One double-winged seaplane sighted 7 miles west of post travelling in a south easterly direction, very high, nationality unknown, visibility good	Informed Hazelwood Castle by Phone call 3 minutes	Rough [?] east wind, sea calm, visibility good	

61	23/2/41	10.20	Sighted one monoplane 6 miles S.E. of post flying low going in north westerly direction, nationality unknown, visibility good	Informed Hazelwood Castle by Phone call	West wind, sea light swell, sky clear, visibility good
62	23/2/41	14.30	Sighted double-winged airplane 5 miles west of post flying in south- easterly direction, nationality unknown, visibility good	Informed Hazelwood Castle by Phone call	[No weather report]
63	24/2/41	18.20	One aircraft sighted about six miles North of LOP flying high eastwards, nationality unknown, visibility good	Informed Hazelwood Castle by 3 minute phone call	Light north west wind, sea calm, visibility good
64	25/2/41	08.25	One seaplane sighted 5 miles SE of LOP flying high in a westerly direction, nationality unknown, visibility moderate	Informed Hazelwood Castle by Phone call	[No weather report]
65	25/2/41	11.50	One Sea Plane sighted two miles east of LOP Flying low in a westwardly direction. Visibility Good. Nationality British	Informed Hazelwood Castle by Phone call	Light south wind, Sea Calm, Visibility Good
66	25/2/41	19.15	Sighted one seaplane about 4 miles South of Post flying east, visibility moderate, nationality unknown	Informed Hazelwood Castle by Phone call	South wind, sea calm, sky clear, visibility good
67	26/2/41	10.50	Sighted one plane four miles South east of Post flying high going NW, nationality unknown visibility moderate	Informed Hazelwood Castle by Phone call	Strong South wind, sea light swell, visibility poor
[from 20	5/2/41 to				
2/3/41	the ot St				
John's P	oint was				
poor -	– with				
strong s	south or				
south	west a rough				
sea	and				
poor/mo	derate				
visibility	v - there				
reported	over				
this peri	od]				
			Sighted one seaplane 7 miles	Informed Hazelwood	Light west wind,
68	2/3/41	12.00	West, high, nationality unknown,	Castle by I none can	visibility [blank]
			visibility moderate		T 14 4 4
			Signted one plane 5 miles S.E. of Post flying low going west	Informed Hazelwood Castle by Phone call	Light north wind, sea calm
69	4/3/41	10.00	nationality unknown, visibility		visibility good
			Sighted one seaplane 5 miles	Informed Hazelwood	West wind, sea
70	4/3/41	19.20	south west of LOP flying east, high, nationality unknown	Castle	calm, visibility
			Sighted one seaplane 5 miles	Informed Hazelwood	South-West wind,
71	5/3/41	12.30	south of post flying in a westerly	Castle by Phone call	light swell, sky
			direction		cloudy, visibility moderate
72	7/3/41	10.55	Sighted one seaplane 7 miles	Informed Hazelwood	Fresh North East

			south east of post flying low going	Castle by Phone call	wind, light swell,
			N.W., nationality unknown		visibility good
73	7/3/41	19.20	Sighted one seaplane 6 miles north of post flying high in a southerly direction, visibility good, nationality unknown	Informed Hazelwood Castle by Phone call	Fresh North West wind, sea light, sky clear, visibility good

Fitting the individual sighting introduced above (Serial 65) into observation and event patterns from a wider chronological period and using the context of the wider history of February 1941 suggests that the aircraft sighted in Serial 65 was a flying boat taking off from the RAF base at Castle Archdale on Lough Erne using the newly agreed 'Donegal Air Corridor' to access the Atlantic Ocean. Only an analysis of the trends in the St John's Point logbook from February 1941 indicates that this was the case. The majority of the aircraft sightings in the section above are of aircraft, mainly flying boats, sighted from southeast to southwest of the LOP transiting Donegal Bay from east to west or from northwest/west to east. During the Second World War it was trends such as these and patterns and changes in such trends and patterns that most interested G2 officers interpreting M&CWS service reports.

Individual Coastwatchers were reporting on what they saw in their given locality, they did not have the bigger picture available to them and never knew how their collected reports were collated and interpreted by the Command Intelligence Officer and his superiors in G2. Nor did Coastwatchers necessarily know exactly what they had sighted. Training was often poor, particularly in the early stages of the war, sightings were often momentary, hindered by poor equipment, weather phenomena, and the lack of adequate information on what was being observed. Reporting skills at some posts, particularly busier posts (Inishowen, Malin Head, Howth Head, Greenore Point, for example) were generally superior to some of the quieter posts along areas of the west coast.

Activity was never uniform at a post. There could be quiet periods lasting days or weeks. This could be due to weather obscuring belligerent activity, seasonal factors, or simply that the post was located in a quiet sector. Try to relate what appears to be significant activity and events at a LOP to what was happening at that time in the Battle of the Atlantic, the Battle of Britain and the Second World War close to Ireland. A handful of posts at strategic locations were always busy – these tended to be overlooking main sea-lanes and air-lanes. As the war changed some posts became busy – the most obvious example being St John's Point LOP in south Donegal which, until the opening of the air corridor over Ballyshannon from the flying boat base at Lough Erne was something of a backwater.

A final point to bear in mind is to note 'what is not happening' at each post or what has stopped happening. Lack of 'action' in an area can often be as important as 'action' itself as it shows the relative importance/unimportance of an area to belligerent activity.

8: Plotting observations from LOP logbooks onto basic maps

To really understand what was happening at a LOP it is helpful to plot events on a map of the local area surrounding the LOP. OSI 'Discovery Series' maps normally contain enough information regarding topography and townland names. Coastwatchers used local names if they were recording an event at a particular location. These may not be the same as modern townland derivations.

For air and sea movements and sightings it is often helpful to identify trends and patterns by plotting the location and direction of entries by hand on a paper map. To do this take copy the roughly 10 to 20 miles around your chosen LOP, using either an OSI Discovery Series map or an online map. Orient the LOP by placing compass points N, S, E, W out from the LOP in the shape of a + with the LOP at the centre of the +.

Using a compass draw concentric circles at 2, 4, 6, 8, 10 miles as appropriate out from the post (LOP as centre of the circle) around the compass point cross. It helps to do one master copy and recopy or reprint that master copy. Using a map for each day, week, fortnight or month it is possible to plot location and direction, but not altitude. Three-dimensional mapping software using X, Y and Z axes would enhance this approach considerably and time series data could also be incorporated to give a moving map of events and sightings at one or more LOPs.



Basic plot for LOP 4 (Cardy's Rocks) showing compass directions and distance rings.

Plotting individual entries on a map builds up a regular picture of what each LOP saw. Below is a map summarising aircraft sightings from Howth LOP (LOP 6) in late 1944 and early 1945. Based on the compass point distance ring map outlined above it shows (green arrow/s) that the LOP saw aircraft

passing from east to west and west to east approximately six miles to the north of the post. Given the location of Dublin (Collinstown) Airport this pattern is civilian Aer Lingus aircraft using the airport on flights to Manchester and Liverpool. The blue arrow/s shows flights from the north heading south and it indicates that these aircraft used the Irish coast and the Kish Lighthouse for navigation. This latter point is further brought home by looking at flights from south to north (red arrow/s) which show the same coastline related pattern but clearly shows these flights using the Kish as a waypoint. Examination of series of individual entries shows these to be routine patrols and training flights.



Summarised visualisation of aircraft sightings from Howth LOP (LOP 6) for late 1944 and early 1945 Appendix 1: What does a LOP see and report on a regular basis?

Below is a check-list of the sort of events and details one might expect to find in a LOP logbook.

A: Sightings of aircraft:

1. What is the predominant nationality (Irish, British, United States, German, Unidentified)?

- 2. Does the predominant nationality change over time?
- 3. What types are sighted?
 - a.i. 'fighter' or 'bomber'
 - a.ii. Named types such as 'Liberator', 'Flying Fortress', 'Spitfire', 'Condor'?
- 4. What time do flights occur at and what is the interval between flights?
- 5. What is the altitude and the direction of flights?
- 6. Are there regular flight-paths, time patterns, directions of flight?
- 7. Are flights 'passing through' or are they indicative of activity in the area?

B: Sightings of shipping:

What sort of vessels are sighted?

- 1. Surface vessels?
- 2. U-boats?
- 3. Convoys?
- 4. Local vessels?
- 5. Lifeboats from vessels in distress or sunk?
- 6. Speed and direction of movement of vessels?
- 7. Are there regular shipping movements?

C: Mines in the waters close to the LOP or washed ashore:

- 1. Does this occur at a specific time of year?
- 2. Where are mines washed ashore?
- 3. How are they disposed of?

D: Flotsam was ashore near to the LOP:

- 1. Nature of item?
- 2. Where does it come ashore?
- 3. How is it disposed of?

E: Dead bodies washed ashore near to the LOP:

- 1. Where is the body washed ashore?
- 2. Who discovers the body?
- 3. Is the individual identified?
- 4. How is the body received and dealt with?
- 5. Who is involved in the recovery of the body?

Garda reports and other information on bodies washed ashore during the Second World War are available in DFA 200 series at the National Archives, Bishop St., Dublin 8.

F: Air crashes or aircraft that crash-landed:

While crashes of belligerent aircraft occurred across Ireland during the Second World War, LOPs were by the nature of their activities either observers of crashes themselves or of aircraft that later crashed.

G: Aerial bombings:

Luftwaffe aircraft bombed locations in Ireland on a number of occasions during the Second World War. The most significant of these was the bombing of Dublin's North Strand on the night of 30-31 May 1941. LOP logbooks provide a first-hand account of the events leading up to the bombing, the bombing itself and the aftermath.

Appendix 2:

LOP logbooks contain considerable information on how the M&CWS fitted into the Defence Forces structures of 1939 to 1945, who individuals Coastwatchers were, who they reported to, how each post operated and who visited the post.

A: LOP Personnel:

- 1. Establish who the personnel of each LOP were and their service numbers.
- 2. Are the personnel men with 'local names'?
- 3. Are they related to 'significant individuals' in the area?

4. Were they individuals who might have been active between 1916 and 1923? Could they have been in the 'Volunteer Force' in the 1930s?

5. Do LOP personnel change often or is it the same contingent of Corporals and Volunteers who man the post for the duration of the war?

- 6. Are any personal details about each Coastwatcher apparent from the Logbook?
- 7. Can local history or local information add any details to the Logbook record?

Army No.	Rank	Name	Service dates	Where from	Other details
207522	Cpl.	Patrick Crotty	1940-5	Ross	At LOP from Jan. 1940, promoted to Cpl in Mar. 1940.
207526	Vol.	Michael Griffin	1940-5	Cloughansavaun	
?	Vol.	Mickey Hanrahan	1940	Cloughansavaun	
207525	Vol.	John Gorman	1940-5	Moneen	
207638	Vol.	John Joe Haugh	1940-5	Clougher	
207515	Vol.	Timmy Crotty	1940-5	Ross	
209987	Vol.	John Blake	1940-5		
207637	Vol.	Martin Austin	1940-5	Outerard	
207516	Vol.	Peter Gorman	1940-1	Moneen	Transferred to Barracks in 1941
210286	Vol.	William Nilan	1941-2	Wilkinson's house, Kilbaha	Posted to Hag's Head LOP in 1942
210081	Vol.	Paddy Keane	1942-4	Tullaig	Joined from the 23 rd Infantry Batt.
?	Vol.	Tommy Dunne	1945	Kilbaha	

Personnel from LOP 45 (Loop Head) compiled from LOP logbooks for the post with additional local knowledge as to where in the local area each Coastwatcher was from.

B: Who made reports from each LOP and who were they reported to?

1. LOPs were neutral Ireland's frontline and events sighted by LOPs were reported to a more senior authority by telephone.

2. Recipients of information from LOPs could include the local military post, Command Headquarters, Air Defence Command.

3. The telephone was the most immediate means of communication available to each LOP. It was installed in most LOPs by mid-1940.

4. Telephones were a relatively new form of technology in many isolated parts of Ireland in the 1940s. Coastwatchers had to be trained to use the telephone as it was not a commonplace object in households as it is today.

5. The equipment was primitive, prone to failure and could easily be put out of operation by adverse weather conditions.

C: LOP Routine:

Try to establish the daily schedule for each LOP – look at the 'watches', when they change, who takes which watches and what routine and operational chores/events occur during each watch. The table below shows the routine at Rush LOP (LOP 5) north of Dublin on Ireland's east coast.

	1. Hand-over Inspection from Evening Watch
	2. Weather Report (Log) (0000)
MCUT	3. Test emergency ADC reporting procedures
NIGHI 0000 to 0800	4. Time Signal Check with ADC to synchronise LOP clock
0000 10 0000	5. Phone Call to/from Gardaí (Rush/Balbriggan) 'All OK?'
	6. Visits from Gardaí in the 'early hours' of the morning
	7. Phone 'All Clear' to ADC (0630) and weather report
	1. Hand-over inspection from Night Watch
	2. Weather Report (Log) (0800)
DAY	3. Weather Report to ADC (0800)
0800 to 1600	4. Test emergency ADC reporting procedures
	5. Training (1430ish)
	6. Medical inspection
	1. Hand-over inspection from Day Watch
	2. Pay Parade (1600)
	3. Weather Report (Log) (1600)
EVENING	4. 'All Clear' to ADC (1600)
EVENING	5. Test emergency ADC reporting procedures (22-2300)
	6. Weather report to Air Defence Command (22-2300)
	7. Time Signal Check with ADC to synchronise LOP clock
	8. Phone Call to/from Gardaí (Rush/Balbriggan) 'All OK?'
	9. Garda Visit to post at various times

Watches and routines at Rush LOP (LOP No. 5)

D: Weather reports:

1. Each 'Watch' made a basic weather report and these provide not only important data in their own right, but are important linked data to the major events that occur at each post.

2. Weather phenomena – storms, fog, bright sunlight – may hinder observations at a post and explain the nature of the data in a logbook during a given period.

3. Do air/sea sightings, mine reports, bodies washed ashore, relate to weather and seasonal factors?

4. Do sightings related to any strategic facility in the area – e.g.: sightings from Howth LOP often relate to movements from Dublin airport, similarly Loop Head LOP aircraft sightings relate often to movements from Foynes/Rineanna and marine movements from the Loop Head LOP relate to shipping movements along the Shannon estuary from Limerick and Foynes.

E: Who visited the LOP – are they civilian or military and when do they visit?

- 1. On occasion military personnel on official business or on exercises visited LOPS.
- 2. These visits give an insight into ongoing military activity in the local area.

3. Members of An Garda Síochána liaised with Coastwatchers over suspicious activity in the area of the LOP.

Irish Military	Civilians	Civilians	Irish Political	Other
	connected with		figures	
	M&CWS			
District Officer on	Dept. of Posts &	Local doctor	Taoiseach	'Suspicious'
routine inspection	Telegraphs			figures
Local Military	linesmen or	Members of the	Minister for	Shipwrecked
officers	engineers	clergy	Defence	sailors
High-ranking		Members of An		Foreign
officers (EG: Chief		Garda Síochána		merchant marine
of Staff)				personnel
Depot staff	Department of	Local fishermen		
delivering/collectin	Defence			
g	officials			
equipment/uniforms				

Personnel who might visit or be seen by a LOP

F: What miscellaneous or strange events occur?

- 1. Sighting of strangers?
- 2. Unusual weather phenomena?
- 3. Suspicious lights spotted?
- 4. Chance events concerning individual Coastwatchers?
- 5. Events concerning local community life in the area surrounding the LOP.

G: Construction of 'Éire Signs' (from 1943-44)

Through mid-1943 and through 1944 Aerial Navigation signs were constructed at each LOP. Built in local stone they read ÉIRE, with the number of the post place above. Twelve metres long and six metres high, often bigger, each 'Eire Sign' was made up of over 150 tons of stone and was white-washed to improve visibility from the air. LOP logbooks often contain entries on the construction and upkeep of the signs. The 'Éire signs' were daytime aids to navigation visible to passing aircraft, alerting pilots that they were over neutral Ireland.

American aircrews crossing the Atlantic were given maps with the locations and numbers of each 'Eire Sign' marked to enable them to navigate safely out of Irish airspace if they were lost. The number '45' identifies the sign as that on Loop Head.



The 'Eire sign' at Loop Head after being excavated and restored by the local community in 2012

H: Co-operation with ADC

LOPs from LOP 1 at Ballagan Point in Louth south to LOP 20 at Ram Head in Waterford were linked by phone into the basic 'early warning system' operated by Air Defence Command (ADC) by which suspicious aircraft entering Irish airspace were reported and tracked over Irish territory.

The logbooks of LOPs 1 to 20 thus often record extra information concerning co-operation with ADC. This could be as simple as reporting air incursions directly to ADC rather than to the local military post. On the other hand it could include more complex operations conveying a series of colour-coded alerts should a threat arise or working as part of an open phone net connected to ADC in the case of major emergencies.

East coast LOP logbooks contain the best observation information on the German aircraft that bombed Campile in Wexford in August 1940 and Dublin's North Strand in May 1941. They also sighted the German aircraft that blitzed Belfast in 1941.

Appendix 3: Merging reports from LOPS

If a significant event was spotted from a number of adjacent LOPs it is worthwhile merging reports to provide a broader picture of the episode.

The table below shows how on 18 January 1945 LOPs at Howth Head, Rush, Cardys Rocks and Dunany Point each sighted the same group of frigates hunting a German U-boat of Ireland's east coast. This occurred as Irish civilian air traffic (Douglas DC3 and de Havilland biplanes) from Dublin airport transited the area. LOPs are colour-coded, abbreviations are used for directions (N, S, SE, etc.) and to ease transcription (BP = biplane, MP = monoplane, M = miles, etc.) and altitudes are given as four digit numbers without 'feet'. Material in square brackets is additional to that found in the logbook. The merged reports give a much clearer picture of the event.

Perhaps the most significant merged reports are those from LOPs along the north Mayo coast from the early morning of 26 May 1941 which show the two RAF Catalina flying boats (Z/209 and M/240) who's sightings of *Bismarck* enabled the Royal Navy to locate and sink the German battleship the following day. Their tracks are reproduced in a figure below.

	Howth	18/1/45	1113	One Douglas monoplane five miles North West
	Howth		1115	One hinlane 5 miles north moving east 3000 Irish
	Duch		1115	1 BP 1MP 6m S mE 2000
	Howth		1113	One hinlane 6 miles north east moving west 500
2226	Dunch		1244	2 Dettleshing 12 miles SE menoguyring
2550	Dunan		1307	2 Battleships 15 miles SE manoeuvring
	y Horrith		1442	One highers (miles north west maying asst
	пожш		1445	1000
	Rush		1450	2 Cruisers 6m NE mS One 6m E going S 'she
				may be a destroyer as there is KO and other
				figures but cannot make them out on her side forward
2337	Dunan		1454	1 battleship 3m E manoeuvring (K348) 2 nd
	V			Battleship 4 m SE manoeuvring (K314)
	Rush		1509	the other destroyer is 6m NE (1509) in rain
				Squall
2338	Dunan		1521	1 Battleship 14m SSE moving S
	у			
2477	Cardys		1532	Destroyer 7 miles E moving N
2478	Cardys		1533	Destroyer 5 m N moving E, changed course ad
				went North
	Rush		1535	Destroyer 5m E mN 5000 tonnes British 10
				knots viz mod
	Howth		1540	One frigate 6 miles north east manoeuvring no
				direct course
2479	Cardys		1542	1 HIGH-WINGED twin-engined MP 5m SE m
				N 2000 USA
	Rush		1548	1 LW MP 4mN mW 2000
2339	Dunan		1553	1 2E high-wing MP 6m SW mNE 2000
	у			
2340	Dunan		1608	Battleship 9m SE mNE

	У			
	Rush	1615	1 MP 7m E mS	
	Rush	1616	1 LW MP 6mSE mW Irish 1000	
	Howth	1620	One Douglas monoplane 6 miles north east of moving west 1600	
	Howth	1626	Two low winged single tailed monoplane 7 miles south east moving North East 3000 or so one Low wing single tailed monoplane 7 miles north east moving 3000 frigate still maneuvering 8 miles north-east of post also second frigate site at 8 miles north east also to low wing single tailed monoplane 7 miles south east and north east 3000	
2480	Cardys	1630	Destroyer reported at 1533 went northeast of post. Destroyer reported at 1532 'cruising from N to S 3 miles E of post' K316 [HMS Drury Captain Class Frigate].	Strong N wind overcast light swell
	Rush	1630	Eastern Sector ran in re destroyers. Weather: viz poor, sky overcast with rain, sea rough, fresh NE wind	
	Rush	1642	Frigate 9m E mS. 1 LW MP 5mE mS 1000	
2341	Dunan	1714	LW 1E MP 4m N mSE 2000 Br	
	v			
2481	Cardys	1719	1 LOW-WINGED MP 2m E m SE alt 4000	
	Rush	1723	Frigates: 1 9m NE other 10m E. 1 AC 5mE mS	
	Howth	1730	two frigates manoeuvring 8 miles north of post now moving and North East	
	Howth	1738	One low wing single tail monoplane 6 miles south east moving N 1000	
	Howth	1800	Aircraft 6 miles south east moving North East	
	Rush	1803	Frigates 8m E	
	Rush	1947	4 White flashes 20 miles NNE	
	Howth	2043	One large boat like a line 10 miles north east fully illuminated moving south	

Composite reports from LOPS at Howth, Rush, Cardys rocks and Dunany Point for 18 January 1945.



Tracks of Z/209 and M/240 along the north Mayo coast on 26 May 1941 as seen by LOPs in the area.