

‡10 The “Theft” of the Neptune Papers, or: Does the Astronomer Royal Merit an Amnesty?

In Which We Learn When & Why the RGO Neptune File Vanished

A The Disappearance

Among astronomers of historical bent, it has been rumored for years that the Royal Greenwich Observatory’s Neptune Papers were removed decades ago from the RGO by the well-known & well-connected astronomer Z. This file contained not only the 1845-6 Neptune correspondence of Astronomer Royal Geo. Airy, but also John Couch Adams’ famous & crucial original handwritten summary of his computation of then-undiscovered Neptune’s orbit, based upon the unknown planet’s perturbations of Uranus’ motion. The computation’s alleged date, 1845 October, has been put in question¹ by Rawlins 1992W.

B The Papers’ Nonavailability Is Publicly Admitted

Finally, Britain’s *Popular Astronomy* (1988 January p.5) even printed an advertisement [emphases added here&there by *DIO*]:

Who stole the Neptune papers?

B1 One of the greatest treasures of the Royal Greenwich Observatory’s archives is missing, believed stolen — the 140-year-old correspondence of Sir George Airy concerning the discovery of the planet Neptune. These lost papers would fill in one of the most controversial chapters in the history of British astronomy. [*DIO*: For fine summaries, see Turner 1904 Chap.2 or Smith 1989.]

B2 The Neptune story began in 1845 when John Couch Adams, a young Cambridge mathematician, calculated that an unknown planet was disturbing the motion of Uranus, and worked out its position. He sent his results to the Astronomer Royal, Sir George Airy, who failed to organize a search. Similar calculations were *later* made in France by Urbain Leverrier, and led to the discovery of Neptune in 1846 at Berlin.

B3 In the ensuing controversy, Airy was severely criticized² for his lack of action on Adams’ calculations. Airy’s correspondence on the matter, *which has still not been fully studied by historians* [*DIO*: this after 140 years . . .], *would be vital in explaining what went wrong.*

B4 The Neptune papers are believed to have *gone missing* in the 1960s [*DIO*: see below at §E13], when supervision of researchers in the RGO archives was less strict than it is now. Historians have known about the loss for some years, but the first public announcement was made by RGO’s archivist Adam Perkins to this year’s convention of the Federation of Astronomical Societies at Herstmonceux on October 3.

B5 Janet Dudley, librarian at RGO from 1978 until last year, told *Popular Astronomy* that she had searched for the papers without success. “I think they have been removed,” she said.

B6 So who took them? Janet Dudley’s predecessor, Philip Laurie, suspected an eminent astronomer who is currently based overseas. “His suspicion could well be right,” says Janet. “If so, hopefully the papers still survive. The Observatory would be delighted to have them back.”

B7 Anyone who knows the whereabouts of the missing papers is invited to get in touch with RGO, where archivist Adam Perkins is offering an amnesty for their return.

C Background

C1 However, in “The Neptune Conspiracy”, DR noted (Rawlins 1992W §C5, or here at §H6): [a] Z was a top figure at RGO, [b] RGO was a major living gainer from the file’s disappearance if it revealed (as DR proposed) that Brit-hero Adams’ claim of discovery-priority (ultimately promoted by longtime Astronomer Royal Geo. Airy) would be compromised by publication of this critical file, which had, remarkably, *been kept from public view for over a century* before its odd disappearance. (An earlier RGO Chief Assistant, H. Turner, saw it: “The letters . . . pinned together just as Airy left them”, Turner 1904 p.48. Yet even Turner had to use the published M16 account, not the originals.)

C2 When, on 1992/10/30, *DIO* hurriedly published the Rawlins 1992W analysis, DR had not yet taken the trouble to check his own long-neglected correspondence with the RGO. However, DR finally looked it out, because he had long been a little uneasy about a faint memory-impression that: the RGO Neptune file had seemed to evaporate at about the time he had asked to see it.

C3 When reading this correspondence now, one must remember that, in 1966, DR was in his twenties and — though critical & suspicious of 1846 British behavior (because of the nonsensical British version of the Neptune legend) — he was rather naïvely trusting of those he was dealing with a century later, and also implicitly shared an attitude which some readers will initially come in with: why, at this late date, would the British astronomical establishment wish to continue to cover up the truth about the Neptune affair?³ (In fact, there is no doubt at all that RGO suppressiveness has far outlived the Neptune story’s participants: see Rawlins 1992W fn 34. Remember, too, that a memorial to Adams is in Westminster Abbey,⁴ near I. Newton’s tomb, physically symbolizing a public trust in an astronomical legend — a legend whose shakiness British astronomy will therefore not be eager to acknowledge.) Also, DR was perhaps overextrapolating, from David Dewhirst’s forthcoming attitude, to the implicit supposition that all modern British astronomers were honest. (DR has since been enlightened in this connection by M. Hoskin & D. Hughes. Indeed, said enlightenment materially assisted in triggering a fresh DR look at the Neptune legend, an investigation which grew into Rawlins 1992W.) On 1967/3/2, David sent DR photocopies of the entire hitherto-unplumbed Cambridge Observatory file on Neptune [CON] (a precious gift and prime source, for which DR will always remain grateful).

C4 Final key background fact: at the time of the quarter-century-old DR-RGO correspondence we will review below, the RGO was just entering into the massive project of microfilming all its historical files, to make them available to scholars internationally. Thus, if the RGO Neptune file did not disappear promptly, it could no longer be kept secret — and scholars all over the world (including already-suspiciously-inquiring DR) would soon be plumbing its long-secreted data.

¹ Rawlins 1992W (*DIO* 2.3 ‡9); e.g., §C7 & §H1 item [4].

² Rawlins 1992W (§§A3&E7) argues for granting much-abused Astronomer Royal Airy a partial amnesty.

³ E.g., an intelligent British astronomer raised this point in a 1993/1/24 letter to DR.

⁴ This cements official commitment to the legend. (Similar to R. Peary’s Arlington Cemetery memorial.)

D Open Records & Open Disagreement

To: DR, 3120 St.Paul Street, Apt.413-F, Baltimore, MD 1966/12/21
 From: David W. Dewhirst, Univ Cambridge
 The Observatories, Madingley Rd, CB3 0HA, U.K.

D1 The Librarian of St.John's College has referred to me (as astronomer and librarian here) your letter asking about the MSS of Airy, [1846 Cambridge Observatory chief James] Challis, etc., relating to the discovery of Neptune.

D2 We have here the greater part of the relevant correspondence addressed to Challis. That part addressed to Airy *I have never seen* [emph added], but I suppose it to be in the archives at the Royal Greenwich Observatory. . . . I have written to Mr. P.S. Laurie at the RGO to confirm my suspicion.

D3 The three particular letters Airy to Challis of 1846 July 9, 13 and 21 are all here. The letter numbered 15 (in [M16]) lacks the phrase "a possible shadow of" in the printed version. [DIO: David was the first to reveal this censorship, as noted at Rawlins 1992W §B2.] Letter 16 [of M16] is printed in entirety: we also have Airy's MS of the "Suggestions".

D4 *I believe all the relevant MSS are extant; I have no reason to believe that anything important was fortuitously or purposefully destroyed.* [Emph added for hindsight irony.] You may know that Airy most carefully preserved *even his trivial papers.* [Emph added. See Turner 1904 p.48, Smith 1989 n.37, or Rawlins 1992W fn 36.] Nor do I believe that there is much of crucial import that has not already been published in substance

To: David Dewhirst 1967/1/1
 From: DR

D5 I am deeply grateful for the trouble to which you obviously went in order to reply so fully to my letter on the Neptune manuscripts. I can only hope that you found such rummaging as intrinsically enjoyable as [do] I and my [librarian] wife . . . and that it is not too awful an imposition to request [photocopies] of a few of the letters that you found. . . .

D6 I realize that you feel there may be nothing of value in the unpublished portions of the correspondence — and your familiarity with the period leads me to expect that indeed there *is* nothing of great import. But unlikely material does occasionally give surprising yield, and I've tried enough new viewpoints on the Neptune affair that perhaps I would see (or maybe just think I see) something of significance in what has hitherto been laid aside. The letters to Challis about which I am still hopeful are: Airy's "Suggestions" (enclosure with letter of July 13), Airy's letters of July 21 and October 14, and [Rob't] Main's letter of August 8 (all 1846). If Mr. Laurie can place the Challis letters [RGO Neptune file] to Greenwich of July 18, August 7, September 2, and October 12 (and perhaps the Airy-to-Leverrier letter of October 14), I would hope to make the same arrangement concerning copies. Indeed, there may be other letters . . . that have never even been noticed in the literature, much less quoted from. So I wish you would, if possible, [add to] the above [DR] list of manuscripts anything you find that looks unfamiliar to you on (for example) the reasons for the fiasco at Cambridge, or the lamentable fact that Adams was so totally unknown before the discovery outside of a small circle of Englishmen, or on Airy's or Challis' reaction to the various French accusations.

D7 Needless to say, I will be happy to cover the costs of reproduction. . . . [almost any fee for this] would come to less than [paying for] a trip to England (i.e., if in doubt [about a letter's value], reproduce)

D8 It turns out that the 1846/10/12 letter (requested by DR at §D6) was indeed bowdlerized (before Airy published it in M16). See §H12 & Rawlins 1992W §D7. The embarrassing uncensored text of this letter was later published by O.Eggen at *DSB* 3:186-187.

To: DR 1967/3/2
 From: David W. Dewhirst

D9 Further to your enquiries about the Neptune letters, etc., I enclose some material that you may find of interest. [DIO: This is understatement at its finest.] That part of the correspondence that was received by Airy is in the archives at the Royal Greenwich Observatory (Herstmonceux Castle, Hailsham, Sussex) and Mr. P.S.Laurie may be able to help you.

D10 There then follows David's chronological summary of his new catalog of Cambridge Observatory MSS on the Neptune history, a copy of which was enclosed — along with photocopies of all the major items in the file! David had laboriously compiled this catalog in response to DR's 1966-7 pleas for assistance; it has become the official record of the Cambridge Observatory Neptune file [CON], and this catalog has now been printed verbatim (cited to 1967 January, the date of the DR letter triggering the catalog's creation) at pp.110-113 of Patrick Moore's *The Planet Neptune* 1988 (Ellis Horwood *Library of Space Science & Technology*). The letter continued with some temperate advice, much of which DR agrees with (a circumstance which may surprise David, given the revolutionary nature of Rawlins 1992W) and all of which DR appreciates — both for the wisdom displayed and for the kind intent implicit:

D11 I hope you will forgive me if I make a few unsolicited remarks about the "strange history of the discovery of the planet", "the reasons for the fiasco at Cambridge", "the lamentable fact that Adams was unknown . . ." and so on (I quote from your recent letters). . . . I may be thought biased to the defence of Airy, Challis and Adams, since I write this letter in the house in which they successively lived. But whilst the history has been worth the writing I think that further speculations into motives, and the search for hidden meanings in turns of phrase, in some recent studies, have gone beyond what the evidence will bear. It has seemed to me (and re-reading these letters now confirms my opinion) that the courses the several individuals took arose from the reasonable and on the whole proper decisions of able and responsible men in the light of the evidence available to them at the time. It is so easy to say what they *ought* to have done for the greater glory, in hindsight, but most of us (if we flatter ourselves that we had their intelligence and bore their responsibility anyway) would have done what they did in the circumstances. I would not agree, for example, with your judgement that it was a "lamentable" fact that Adams was totally unknown outside a small circle of Englishmen. It was simply a fact. Consider a rather shy graduate student in the University of Maryland today, who has taken a brilliant first degree but not yet got round to writing up his first piece of research and trotting it off to the first available international conference. He is known only to his teachers and a small circle of friends: there is nothing lamentable about it — it is just the way things are, and were more so in a small English University town 120 years ago and when there were no international conferences.

D12 . . . I think there is a case for moderation in pursuing the strange history of the Planet Neptune.

E Approaching the RGO

To: P.S. Laurie, Herstmonceux Castle, Hailsham, Sussex, England 1967/4/1
From: DR, 3120 St.Paul Str, Apt.413-F, Baltimore, Maryland 21218

E1 Dr. Dewhirst has very kindly referred me to you. He may already have told you of my hope for [photocopies] of some of the manuscript material in the Greenwich archives relating to the discovery of Neptune.

E2 The materials I am anxious to see are:

1. Challis' letters to Airy: July 18, Sept.2, Oct.12, 1846.
2. Challis to Main: Aug.7, 1846.
3. Hansen to Airy: all letters from beginning of July, 1846 through June, 1847.

4. Every letter or note sent by Adams to Greenwich from Sept., 1845 through Jan., 1847.

5. Airy to Challis: Aug.6, Oct.14, Nov.3, 1846.

6. Airy to Hansen: July, 1846 through June, 1847.

E3 Also, *if there is a catalogue of the Neptune manuscripts at Greenwich, a copy might be useful for reference purposes.* [Emph added.] And if I have left unmentioned any unpublished material which, in your judgement, merits notice, don't hesitate to include it. I will be more than happy to cover the cost of [copying] both our selections (much that Dr. Dewhirst sent was reproduced entirely on his option and was of great value to me). . . .

E4 . . . do you know at what library J.R. Hind's correspondence is kept? [DIO: for what DR later discovered Hind had revealed, see Rawlins 1984N & Rawlins 1992W §B5.]

To: DR, 3120 St.Paul Str, Apt.413-F, Baltimore, Maryland, 21218 1967/5/24
From: P.S. Laurie, Royal Greenwich Observatory
[private stationery; RGO Ref: 1513B]

E5 I am sorry to be so long in replying to your [4/1] enquiry about the Neptune papers. We are, unfortunately, experiencing great difficulty in finding the manuscripts you require, but *shall be forwarding a list in the near future.* [Emph added.]

To: P.S. Laurie, Royal Greenwich Observatory 1967/6/3
From: DR

E6 My thanks for your note of the 24th — and, in advance, for your search. . . .

To: P.S. Laurie, Royal Greenwich Observatory 1967/9/8
From: DR

E7 I hope you won't think me pesty for writing you. But your May 24 letter on the search for Neptune manuscripts implied that *a list* was imminent [emph added,] and I haven't heard anything since. If this is due to the normal delays of library work, I quite understand (my wife is a professional librarian, too), but I have no way of knowing whether perhaps you sent something long ago which just never arrived. . . .

E8 So this note is sent merely to re-establish contact, against the outside possibility of [a mishap] neither of us could have known of.

To: DR 1967/9/13⁵
From: P.S. Laurie, Royal Greenwich Observatory
[private stationery; RGO Ref: 1513B]

E9 Thank you for your letter of September 8th.

E10 Just after I wrote you at the end of May, Mr. Rickett, who was dealing with the [Neptune] manuscripts, suffered a stroke from which he has not yet recovered.

E11 He *had drawn up a list of letters for examination* [DIO note: were there letters in this file that were *not* "for examination"?] although these, I fear, *do not appear to contain any new material.* [Emph added.]

E12 I shall try to give these my undivided attention *in the near future* and send you *notes on their contents.* [Both emph added.]

E13 So the file *and a fresh* [§E11] *RGO list of its contents* (not sent!) is attested as having existed as late as 1967/9/13. Note that, at §§D6, E1, & E3: DR had requested *photocopies of original documents*, not Laurie's 2nd hand notes-on-contents (§E12). This procedure and the restriction-redolent phrase "for examination" (§E11) both suggest that RGO was considering filtration of original data before they got to DR. (Barbara Rawlins comments: this sounds like Nixon in the latter stages of his compromise-attempt to offer selected peekaboo-glimpses at his Watergate tapes, rather than full public scrutiny. Note that RGO's very next ploy was: nearly two years of persistent nonresponse on the Neptune file.) Two days later, Laurie wrote DR on some particulars regarding the brothers Breen (one of whom assisted Challis in the 1846 Summer secret Cambridge Obs search for Neptune) and on Airy's doings — but this 1967/9/15 letter had nothing to do with the promised details on the contents of the RGO Neptune file. (By contrast to Laurie's previous letters, this one was on official RGO stationery: also RGO ref 1513B: "*Please address any reply to THE ASTRONOMER ROYAL quoting: 1513B and the date of this letter*".) Another period of noncommunication passed. During this long silence (which was to go on for many more months), DR wrote to the "Mr.Rickett" mentioned in Laurie's 9/13 letter:

To: Mr.Rickett, c/o RGO 1967/10/30
From: DR

E14 Mr. Laurie has told me that you had a rather bad stroke during the period while you were working on some of the Neptune manuscripts I'd inquired about for my researches. I want to thank you first-hand for the work you did and to wish you better health as well. . . .

E15 A month later, DR wrote another letter to RGO, mainly on Flamsteed & his accidental 1714 observation of Uranus, recovered by DR (*Science News* 95:96). But no reply was received from either Rickett or Laurie.

⁵ Note that the US-UK mails were quicker in 1967 than today, just as the UK-France mails were quicker than now back in 1846 (see Rawlins 1992W §D5). (But modern internal UK mail can be admirably swift. See ¶7 §A: 1994/1/13&14.)

F The RGO Keeps Bobbing & Weaving

F1 After more months of RGO silence, DR wrote again:

To: Philip S. Laurie, RGO 1968/3/6 [RGO ref: 1513B]
From: DR

F2 Please forgive another little reminder about the Neptune manuscripts. I've been working at a different project lately, so the delay hasn't mattered too seriously. But shortly I'll be starting work on the final draft of [my projected] Neptune book.⁶ It was originally completed some time ago, but I'm revising and re-checking it very scrupulously. Dr. Dewhirst can perhaps give you some idea of its novel rendition of the events. . . . [DIO note: Besides DR's open suspicions regarding the British version of the Neptune history, there was also, e.g., the DR discovery — imparted to David in early correspondence — that in 1846 July, Challis possessed a Berlin Starchart containing Neptune's position. See Rawlins 1984N, Smith 1989 p.406, Rawlins 1992W fn 70.]

F3 Still no reply. After yet another half-year passed, DR persisted.

To: Philip S. Laurie, RGO 1968/9/2 [RGO ref: 1513B]
From: DR

F4 Hello again. I know you've probably had terrible delays and inconveniences from the move out of Greenwich; but I thought, still, that I ought to keep in touch regarding the Neptune manuscripts I was hoping for.

F5 In that vein: do you know if the minutes survive for the 1846, June 29th, meeting of the Board of Visitors of the [RGO]?

F6 Incidentally, I have an article in the April number of *P.A.S.P.* that was constructed in part out of my November letter to you.

To: DR, 3120 St.Paul Str, Apt.413F, Baltimore, Maryland, 21218 1968/9/9
From: M. Berry [?], for P.S. Laurie, Royal Greenwich Observatory
[official RGO stationery; RGO Ref: 1513B]

[“Please address any reply to *THE ASTRONOMER ROYAL* quoting: 1513B and the date of this letter”]

F7 Thank you for your letter of September 2nd.

F8 It happens that, for once, I can supply you with some information. The minutes for 1846 June 29 do survive and so I am able to enclose a copy for your information.

F9 This was indeed of assistance to DR's researches. (See Rawlins 1992W §19 item [c].) But the letter *did not even mention* the matter of the long-secreted RGO Neptune mss requested at the outset of the very letter it was explicitly replying to.

G The File Goes Permanently “Missing”

G1 Yet another half-year went by, with, again, no word on the RGO Neptune Papers. So, DR tried again (naïvely treating the file as unlocated, contra §E10-§E11):

To: P. S. Laurie, RGO 1969/4/17 [RGO ref: 1513B]
From: DR

G2 About two years ago, I wrote you asking for [photocopies] of some manuscripts [relative to] the discovery of Neptune (letter 1967 April 1). Apparently there was some difficulty in locating the material, and I have not heard anything for a long time. Just the other day, I mentioned this to Joe Ashbrook [Editor, *Sky & Telescope*], whom you've been helping out on the Pond era, I gather, and he suggested [that the problem] might have something to do with the [RGO] microfilming project or . . . your move out of Greenwich. In any case, I thought I should write again, just on the chance that the documents sought have finally turned up. . . .

To: DR 1969/6/4
From: P.S. Laurie, Royal Greenwich Observatory
[private stationery; RGO Ref: 34/01]⁷

G3 I'm sorry about the delay in replying to your letter of April 17th, but, in spite of a prolonged search, the missing volume has not materialized. . . .

To: Philip S. Laurie, RGO 1969/6/24 [RGO ref: 34/01]
From: DR

G4 Thank you for your note of the 4th — and for your care in searching so thoroughly for the Airy 1846 correspondence [i.e., the RGO Neptune Papers]. I'm very sorry to have put you to so much trouble for no result — one hopes that the material is not lost forever. (Fortunately, some of it has been published.) . . .

G5 Allow me to broaden my [1969/4/17] enquiry regarding Airy's possible attendance at the 1846 [April] meeting of the R.A.S. . . .

To: DR 1969/7/16
From: P.S. Laurie for Astronomer Royal, Royal Greenwich Observatory
[official RGO stationery; RGO Ref: 34/01]

[“Please address any reply to *THE ASTRONOMER ROYAL* quoting: 34/01 and the date of this letter”]

G6 Thank you for your letter of June 24.

G7 I have examined Airy's official⁸ diary over the period 1845 October to 1846 June

G8 This letter provided the revealing historical information that Airy & Adams both attended the 1846/2/13 R.A.S. meeting — a fact which (as DR noted in his 1969/7/24 reply — see also Rawlins 1992W §16 item [2]) guts one of the traditional alibis for Adams (that he wasn't good at writing letters): he could have spoken directly to Airy regarding his Neptune work (and satisfied Airy's famous radius-vector question: see Rawlins 1992W fn 37).

G9 However, the 1969/7/16 RGO letter did not even mention the RGO Neptune file.

G10 The next time DR asked Laurie about it was during the visit by DR and his wife to RGO in 1970. Again: the story was that the records were mysteriously missing.

⁷ No reason was given for the shift in RGO ref# in this correspondence.

⁸ Question in passing, given the publicly-accessible Airy diary's non-mention of Adams until 1846 Xmas (!) (Rawlins 1992W §19 item [e]): is there a difference between Airy's “official” diary and another Airy diary?

⁶ See *DIO 1.1* ‡1 fn 10 & Rawlins 1992W §B5.

H Chile Nonreception

H1 Let us now remark the hitherto-unrevealed complexity & oddity of the RGO's story: [i] Missing, not missing, hide-for-2-years — and then missing again (for DR, anyway). See §I1 (especially item [f]). [ii] None of these stories are on official RGO stationary, while all the other RGO letters are.

H2 Over twenty years passed before DR wrote to an able US astronomer, who has worked at the RGO, and who shares an interest in the Neptune history.

To: Olin Eggen, Cerro Tololo Interamer Obs, Casilla 63-D, La Serena, Chile 1993/2/15 eo92f8[27,28]

From: DR, *DIO*, Box 19935, Baltimore, MD 21211-0935
(phone: 410-889-1414)

H3 Have you any comment upon the *DIO* 2.3 article [‡9] on the Neptune affair . . . ?

H4 I especially draw your attention to two sections, which I have extracted (from my \TeX file, slightly revised) for printing below.

H5 From fn 2 at the bottom of p.115:

Grosser . . . presumes . . . that the 1845/9 Adams solution was the same as that of “1845/10” = Hypothesis 1. . . . I note that O.Eggen (familiar with the lost RGO Neptune file), in a 1970 bio of Airy (*DSB* 1), vaguely remarks that Adams “called unannounced to present one of his early predictions” (p.86); and, in a 1971 bio of Challis (*DSB* 3), Eggen just says (p.187): “Adams presented Challis in September 1845 with some predictions as to where [Neptune] might be found.”

H6 From [*DIO* 2.3 ‡9] §C5 (atop p.125):

Among scholars today, the widely rumored belief is that the RGO Neptune file was borrowed (& never returned) by the astronomer Z, who used material from it in several publications. Missing from the “missing”-rumor is the fact that, around the time the file disappeared, Z was the Chief Assistant to the Astronomer Royal at RGO. The most likely gainers from this file's disappearance are not Z but: [1] a British legend, and [2] the RGO's reputation.

cc: R [Ian Ridpath]

H7 Receiving no reply, DR wrote again (about 3 months later), as follows.

To: Olin Eggen, Cerro Tololo Interamer Obs, Casilla 63-D, La Serena, Chile 1993/5/12 eo95c8[27,28]

From: DR, *DIO*, Box 19935, Baltimore, MD 21211-0935
(phone: 410-889-1414)

H8 I have no response to my earlier 2 mailings . . . (*DIO* 2.3 1992/12/28 & letter of 1993/2/15). So I again write, requesting information on certain matters relating to peculiar blanks in the history of the 1846 British search for Neptune, a subject on which you have written a number of intelligent articles.

H9 Your illustrious career includes 1940s service at the Lick Observatory, and you claim an association with the OSS (father to the CIA). Later, you were (1956-61 & 1964-5) Chief Assistant to Astronomer Royal Richard Woolley, as well as a CalTech prof at Mt.Palomar (1961-1966), before taking over at Mt.Stromlo (1966).

H10 In your 1970 *DSB* article on Airy, you say (p.87), “The extensive [Airy] biographical data are housed mainly in the new Royal Greenwich Observatory at Herstmonceux Castle, Sussex. Some of those covering Airy's pre- and post-Greenwich careers are in the hands of the writer”

H11 Questions:

[1] At the time this article appeared, you had been at the Australian National University for 4 years (despite continuing close relations with RGO and intermittent travel to England), as Director of its Mt. Stromlo Observatory (where Woolley, still an ANU hon.prof, had been Director some years earlier). I presume you did not transport any Airy mss to Australia. The superficial contradiction here must have a simple explanation.

[2] Why did you become a prime public defender of the RGO's Neptune-affair behavior? Your areas of astronomical specialization are not particularly relevant to this controversy.

[3] You were in the UK at precisely the moment in the late 1960s [specifically 1967/4/24; DR's first request of RGO was 1967/4/1: §E1] when the question was raised (to Astronomer Royal Woolley) of making available to researchers photocopies of letters in the RGO Neptune file, i.e., 1846 Astronomer Royal George Airy's critical Neptune correspondence, which soon after disappeared permanently from RGO's archives (a loss which also occurred during the RGO tenure of your sponsor, Woolley). At this time, you were Woolley's confidante as well as the leading public spokesman (1963-1971) for RGO's side of the Neptune controversy. Thus, I request that you now provide an account of internal toplevel RGO discussion regarding:

[a] how to deal with the palpable threat of imminent public scrutiny of this embarrassing file, and

[b] how it came to be decided that RGO would neither make photocopies available nor explicitly refuse⁹ to do so, but rather would keep putting off inquiries and thereby postpone [§F] carrying out the task — until

[c] a more permanent strategy for handling this delicate problem was decided upon.

H12 You are the last scholar to make verbatim use of previously-unpublished material from the “lost” RGO Neptune file. Your 1971 *DSB* article on Challis quotes from the full original texts of Challis' 1846/10/12 letter to Airy [§D8] and from Schumacher's 1846/10/24 letter to Airy. The words you quote were available nowhere else but in the RGO file.

H13 Questions:

[a] Why is there no bibliography attached to your Challis *DSB* article? (Of the thousands of bios published in the *DSB*, I doubt that more than ordmag 1% lack a bibliography. And, among this atypical microsample, probably not a single article quotes from original mss.)

[b] Why has the RGO's complete list (of the letters in its Neptune file) never been made publicly accessible? (If you have a copy of this list, would you please send me a [photocopy] of it?)

[c] Why was no microfilm (or official photocopy-set) ever made of the precious Neptune file — aside from the wellknown 19th century photo of Adams' “Hypothesis 1” document (the date of which, as shown in *DIO* 2.3 §C7, was added later by Airy)?

[d] When did you make copies of the letters you quote in your 1971 *DSB* commentary?

⁹ But, was the RGO going to say, straight out & unslimily: we prefer an RGO-approved, politically-safe scholar to have access instead of DR? (See §I1 item [f].)

[e] Can you specify an archivist who oversaw these transactions?

[f] Do you have any opinion to offer regarding the identity of the party who removed the RGO Neptune file? Britain's *Popular Astronomy* printed a notice at p.5 of its 1988 January issue, citing 1960s RGO archivist Philip Laurie's long-widely-rumored naming of "an eminent astronomer who is currently based overseas."

[g] The *Popular Astronomy* piece noted incidentally that (in the period from 1846 until the file's modern disappearance), "Airy's correspondence on the [Neptune controversy] has still not been fully studied by historians". Have you an opinion as to the reasons for this?

[h] Would you please send me (& bill me for) photocopies of all the RGO Neptune letters you have the texts of?

cc: C [Charles Kowal]

H14 No reply has ever been received. Which in itself answers some of the most interesting of the letters' questions.

I Reckoning

I1 Concluding comments: It is not credible that an individual stole the Neptune Papers on his own initiative. (See Rawlins 1992W fn 32 & fn 33 on previous cases of "missing" & filtered data in British-science institutional history.) And, don't fail to appreciate the RGO story's sinuous oscillations: [a] Great trouble finding papers (§E5). [b] Found them but — hold on — there's illness in the family, and [c] we're busy making a list (§E10-§E13). [d] Hide&duck for nearly two years (§E12-§G3). [e] Oops, that darned file (no mention of list now) is lost *again* (§G3). [f] In 1971, an RGO-related scholar publishes (§§D8&H12) new material from the very Neptune Papers which RGO has since 1967 (§E5-§G3 & §B4) repeatedly stated it cannot locate (fn 9).

I2 Some questions: Does anyone seriously believe that a genuine thief would suppose these letters to be especially worth money? (We note that none has been asked for.) And why would this hypothetical party also wish to steal the only copy of the list of the file's contents? And why was there only one copy of this list? — as if, indeed, any of these erratic tales deserve the slightest credence

I3 The documents in this article have been published here precisely because, from them, even a naïve reader will swiftly induce the identity of the real "thief".

I4 In conclusion, *DIO* asks that British astronomy finally:

[a] Acknowledge Leverrier's primacy in the discovery of the planet Neptune.

[b] Unshelve the deliberately-suppressed RGO Neptune Papers.

[c] Determine whether the RGO is permitted to confer an amnesty upon itself.

[d] Cease repeating the Adams legend until item [b] is accomplished.

References

CON = Cambridge Observatory Neptune mss file.

DSB = *Dictionary of Scientific Biography*, Ed: C.Gillispie, NYC.

M16 = MemRoyAstrSoc 16:385 (Airy), 415 (Challis), 427 (Adams).

D.Rawlins 1984N. BullAmerAstronSoc 16:734.

D.Rawlins 1992W. *DIO* 2.3 †9.

Robert Smith 1989. *Isis* 80:395.

H.Turner 1904. *Astronomical Discovery*, London (repr. 1963, U.Calif.).